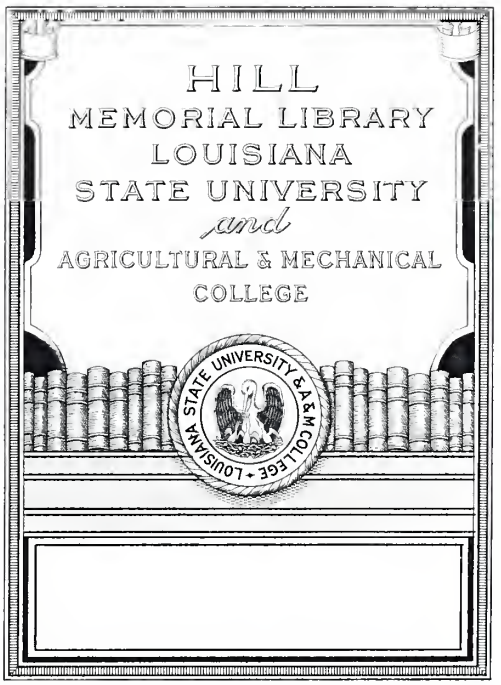
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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries, as against Foreign Competition

Vol. 19 NEW ORLEANS, LA., OCTOBER 1, 1940 No. 1

Annual Address of President W. F. Giles

(Delivered at the Annual Meeting of the American Sugar Cane League, September 26th, 1940)

It was my lot to be elected President of the American Sugar Cane League at a time when the sugar industry of Louisiana was being called on to face problems of greater complexity than ever before in its history. I use the word "complexity" by deliberate choice, because the problems we have been facing during the past year, and are still facing, are problems involving the policy and tactics to be pursued in political and legislative arenas and not, as has been the case so often in the past, combats against the forces of Nature. When, in by-gone years, we have sometimes hovered on the bring of destruction—for instance during the mosaic disease visitation of the 1920's—the problem that we faced was not to find out what needed to be done but to find out how to do it, and the means were fortunately put into our hands by specialists in plant breeding and scientific agriculture. But our problem since I have been President of this organization has been what attitude to take, what course to follow, in the face of an apparent lack of co-operation with us on the part of an able group of men, clothed with wide authority, and known as the Sugar Section of the U. S. Department of Agriculture. Our problem has been and still is to find out what methods and tactics to use in order that these gentlemen may be led to recognize us for what we are—sincere and industrious business men who have everything they possess invested in a going industry, and who are willing to be co-operative up to a point where the loss of their business is threatened but who of course cannot go beyond that point without a fight. It is with such delicate situations as this that the time since I became your President has been largely filled.

It has naturally happened, under such conditions, that our organization has engaged to a greater extent than ever before in its history, in the compiling of facts and statistics and in the dissemination of information designed to educate the people of the United States in regard to our sugar industry here in Louisiana and its importance not only to this community but to the Nation at large. It would gratify us immensely and encourage us beyond measure if we could feel that we stand before a sympathetic, or at any rate an open minded, court. We are depressed and discouraged in a corresponding degree when we feel, as we have on several occasions been made to feel, that however true and factual our representations may be they fall to a large extent among thorns or upon stony ground, so that like the seed scattered by the sower mentioned in the Bible, they can produce no satisfactory harvest.

Passing on now to pleasanter and more agreeable topics I want to report to you that the co-operation between the League and the scientific elements of the United States Department of Agriculture and with the scientists of the Louisiana Experiment Station has kept on in the same close way that has prevailed for so many years. This co-operation has continued to result in incalculable good to our industry both on its agricultural and its mechanical sides. One has only to compare the field and factory practices and results of today with those of 10 or 15 years ago to realize how tremendously the League has advanced our industry economically. We have eliminated, with scientific aid, obstacle after obstacle to our prosperity and I am able to stand here before you now and say with all confidence and conviction that the Louisiana sugar industry is today as economically sound as any other industry in the United States.

THE
SUGAR BULLETIN
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Andrew W. Dykers, Editor
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The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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Officers and Members of the Executive Committee elected at the Annual Meeting of the American Sugar Cane League, September 26th, 1940:

President, W. F. Giles
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3d Vice-President, George L. Billeaud
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its own with any of them on any basis of fair and impartial treatment.

One of the most important co-operative steps the League has taken, in my judgment, since the last Annual Meeting, has been to enter into practical, and by that I mean financial, co-operation with Dr. E. W. Brandes in his capacity as head of the Division of Sugar Plant Investigations of the Bureau of Plant Industry of the U. S. Department of Agriculture in the operation of a refrigeration plant at the Government sugarcane breeding station in Washington, through the use of which Dr. Brandes will be enabled to expedite the breeding of cold resistant varieties of cane. The success of such experiments, even if only in a limited degree, will greatly enhance the safety of our industry during extraordinary visitations of cold weather. Like all cane breeding work, it will of course be a slow and time consuming process.

A great deal of time and money has been spent by the League during the past twelve months in contacting and building up co-operative sentiment among the beet growers in the Northern and Western States with the purpose in view of formulating a policy, in a legislative sense, that would include all the ideas and sentiments on which we can all agree, affecting the application of laws and regulations to the sugar industry of the United States. A great deal of progress was made and the groundwork laid for mutual co-operation, eventually, between all branches of the domestic sugar industry on those points—and there are very many of them—where the same interests prevail among all concerned. No one with any vision and foresight can fail to recognize the importance of this move that the American Sugar Cane League has initiated.

During the last grinding season the League made possible the operation of the Experimental Sugar Mill at the Baton Rouge Experiment Station by guaranteeing the Station against any monetary loss that might accrue from the purchase of cane and other incidentals, exceeding in amount the income derived from the sale of the sugar produced. It developed that there was a deficit of about $2500.00, which the League paid, thus insuring to our industry the information derived by the scientists of the Experiment Station through the operation of this important facility.

It is so well known to all of you that the intensely cold weather of last winter damaged our current (1940) crop severely that I will allude to it here only as a matter of record. The degree of cold reached had not been equalled since 1899 and even the canes we are now using, which are far superior to those in our fields in 1899, could not pass through such an experience, followed as it was by very unfavorable weather, without suffering great harm. Such experiences emphasize the importance of the experiments to develop canes with greater cold resistance which I have alluded to earlier in this report.

The chlorotic streak disease of sugarcane, found to be more or less widely prevalent in Louisiana, has engaged the League's attention a great deal during the past year and the control of this disease was found to involve an expense that appeared to be beyond the League's ability to guarantee. Earnest effort was therefore made to bring about some arrangement by which the necessary money could be had from other sources. It was finally found possible to obtain the consent of the Louisiana Legislature to an appropria-

tion of $10,000 to the Louisiana Sugar Experiment Station for sugar research work and it is from this fund that such chlorotic streak control as may be engaged in will be paid for.

With the exception of the varieties C. P. 29-103 and C. P. 29-120, released last October, there have been no releases of new varieties of cane since our last Annual Meeting. The varieties above mentioned were thought to fill the need in localities where a moderately high yielding mid-season variety, somewhat better than Co. 290 in maturing qualities might be demanded. The applicants for these canes, however, were not numerous.

It will be apparent to all of you that thus far in this Annual Report I have said very little about the all-important Washington situation. The reason is that I am unable to tell you about any very successful achievements in that direction. The Legislative Committee of the League has done an extraordinary amount of work, certainly more than in any recent years, in preparing the text of legislation that would solve the difficulties and injustices under which we labor, and there have been innumerable conferences, both in Louisiana and in Washington, at which the League has been ably represented. Yet, up to this time, no concrete results have emerged, and, as much as I would like to report otherwise, I can only say that we have not as yet been able to change the general policy of the Government in relation to the domestic sugar industry in a way that would enable our business to expand and become more prosperous. The matter is, however, not yet closed and I am optimistic enough to believe that the annual report submitted next September by whoever is then President of this organization will include the record of an amended Sugar Act in which the hopes and aspirations, and in fact the necessities, of the Louisiana sugar industry will be taken care of in a way that will give us all a feeling of confidence in the future that unfortunately we do not have right now.

In conclusion I want to commend all of the League Committees for their splendid work during the year and to thank all of the members of our organization for their loyalty to me and their splendid support and co-operation.

Mr. Barker Gets Encomiums

The following preamble and resolution was unanimously adopted at the annual meeting of the American Sugar Cane League held September 26th, 1940:

Whereas: The year that has elapsed since the last annual meeting of the American Sugar Cane League has been one of the most critical and important, in a legislative sense, in the whole history of this organization and

Whereas: We have been fortunate in having the services, during that period, of a Legislative Committee headed by Mr. Frank L. Barker, a man who is so conspicuous in his ability and his conscientiousness as to command the confidence and respect of all of us and

Whereas: We feel that the devotion to duty shown by the chairman of the Legislative Committee, his self-sacrifice and his able advocacy of the cause of the Louisiana sugar industry in Washington under circumstances that have at times been discouraging and difficult to an almost unprecedented degree, deserve some special expression of our gratitude, therefore be it

Resolved: That, assembled here at our Annual Meeting, we formally compliment Frank L. Barker, the chairman of the Legislative Committee of the League, on the way he has discharged the duties that have devolved upon him and we ask him to accept our assurances of appreciation.

Washington Comments

(By C. J. Bourg)

We certainly have had a hectic time in 1940 on sugar legislation, with a series of developments each of which has produced a climax and a disappointment. First, in April, the House hearings were held and then the President's letter prevented the full consideration of amendments to the Sugar Act which we know to be necessary to a successful operation of the quota system. Then, in June, when plans were made by the Administration for adjournment of Congress prior to the national conventions, the House hurriedly passed a resolution extending the Sugar Act for one year; but, just as the matter was about to come up in the Senate, Congress decided to recess for a month. A third climax has been anticipated for September, but the hearings before the Senate Finance Committee which were first called for August 8th have been postponed pending the completion of the excess profits tax bill. Adjournment was set for September 28th, and hearings on sugar were to have been held, but both hearings and adjournment have been postponed, as the tax bill is still in conference. At the present writing, the date of adjournment has become more uncertain than ever and the prospects are that Congress will take a series of recesses until after the election in November.

What We Produce, We Must Market

The Sugar Division has issued a provisional 1941 proportionate-share acreage determination, which will become effective if and when the Sugar Act is extended to cover the 1941 crop. In the meantime we are convinced that if the present provisions of the Sugar Act are extended without change it will necessarily mean that the Louisiana sugarcane growers must face an acreage reduction or plow-up for the 1942 crop. No matter how one seeks to argue about the effect of temporary relief in production, no far-sighted person can avoid the full realization that without a quota increase, which will permit the marketing of the sugar produced, such temporary relief merely postpones the basic solution to the problems of Louisiana. We must have an area marketing quota which will adjust production and marketing on the basis of a sufficient volume to make it possible for every farming and processing operation to be efficient, economic and profitable. Basically, our quota is inadequate to get the proper and satisfactory results.

The effect of the 1941 provisional determination is confined to acreage and production of sugar. It does not provide for the marketing of the sugar produced; therefore, unless provision is made by amendment to the Sugar Act for an increase in the marketing quota of the mainland sugar cane area, there must necessarily be an adjustment, involving a plow-up or reduction in acreage for the crop of 1942, at the time that the proportionate-share determination for 1942 is announced one year hence. This will entail a reduction in acreage for Louisiana of from 17% to 20% in 1942, as shown by the following table:

	Tons
Carryover into 1940	180,000
1940 Production (est.)	333,000
Total Supplies, 1940	513,000
1940 Marketing Quota	361,000
Carryover into 1941	152,000
1941 Production (est.)	450,000

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Total Supplies, 1941	602,000
1941 Marketing Quota	361,000
Carryover into 1942	241,000
Normal Carryover	158,000
Excess over Normal Carryover	83,000

If there should be a carryover of 241,000 tons into 1942 and the quota for Louisiana and Florida remains at 420,000 tons, then we will be allowed to produce 83,000 tons less, which means a reduction in acreage of about 18%. Admitting that the provisional determination is fair, it does not meet the needs of the Louisiana sugar industry unless provision is made for marketing by an increase in quota.

Corn Sugar Hearings

For many years, the producers of corn sugar have been seeking to enter the markets which have been supplied by cane and beet sugar. They have made no progress with respect to displacing sucrose by the use of corn sugar on the table, but they are now engaged in a tremendous drive for selling corn sugar to manufacturers, canners, and preservers, and not without some progress. One of the difficulties which they have encountered has been the labeling regulations of the Pure Food and Drug Administration which require that corn sugar be named on the label when used as an ingredient in the manufacture of ice creams, confections, preserves, jams, etc. Recently we have all noticed the expensive colored two-page national magazine advertisements praising corn sugar under the name of dextrose. Presently, hearings are being held by the Pure Food and Drug Administration to determine whether labels on fruit preserves, jams, and jellies, should mention whether the sugar used is corn sugar, cane sugar, or beet sugar. The hearings have now proceeded for two weeks, and are still going on with witnesses appearing on behalf of the producers, of the buyers and manufacturers, and of the consumers, including experts on foods, diets, and allergies.

It seems to us that eventually the question will arise whether corn sugar will be recognized by federal statute as an article directly competitive with sucrose made from sugar beets or sugarcane and when that time comes it will have to be decided whether the tax on sugar and the quotas which affect the production and marketing of beet and cane sugar will be made applicable to corn sugar as well.

And so the problems of the American sugar industry continue to multiply, and the leaders always have something new to think about!

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Letter To Senator Ellender

New Orleans, September 19, 1940.

Senator Allen J. Ellender
Senate Office Bldg.,
Washington, D. C.

Dear Senator:

Replying to your letter of September 12th and confirming our conference of September 16th in connection with your letter, in reference to the proposed provisional 1941 proportionate-share determination for sugarcane farms in Louisiana and Florida. Upon receipt of your letter, I discussed the proposal with members of the Legislative Committee of the American Sugar Cane League and came to Washington for the purpose of conferring with you and with officials of the Department of Agriculture, in order that there might be a complete understanding of the effect of the determination.

In your letter of September 12th, you state, "I felt that if I could accomplish by administrative ruling what we sought to obtain by enactment of legislation, our people would fare just as well." The legislation to which you refer is the 80,000 ton increase in the marketing quota of the Mainland Sugar Cane Area, which you mention in the first paragraph of your letter.

As I explained to you, the effect of the provisional determination is confined to acreage and production of sugar. It does not provide for the marketing of the sugar produced; therefore, unless provision is made by amendment to the Sugar Act for an increase in the marketing quota of the Mainland Sugar Cane Area, there must necessarily be an adjustment, involving a plow-up or reduction in acreage for the crop of 1942, at the time that the proportionate-share determination for 1942 is announced one year hence. This will entail a reduction in acreage for Louisiana of from 17% to 20% in 1942, as shown by the following table:

	Short tons, raw sugar
Carryover into 1940	180,000
1940 Production (est.)	333,000
Total Supplies, 1940	513,000
1940 Marketing Quota	361,000
Carryover into 1941	152,000
1941 Production (est.)	450,000
Total Supplies, 1941	602,000
1941 Marketing Quota	361,000
Carryover into 1942	241,000
Normal Carryover	158,000
Excess over Normal Carryover	83,000

I agree with you that the provisional determination is fair, but it merely covers production and does not meet the needs of the Louisiana sugar industry.

In view of the approaching adjournment of Congress and the desire of the President and the Department of Agriculture to have the Sugar Act extended for one year, the opportunity is presented whereby a satisfactory solution to the temporary problems of the sugar industry may be provided. I agree that the situation has become quite serious because of the effect of the European War upon

world commerce, and particularly upon commerce in sugar of Latin American origin; but, representing the sugarcane growers of Louisiana, I must insist that while amending the Sugar Act to provide for its extension, one or two noncontroversial amendments should be adopted which would afford relief. We must not overlook that although the extension would be for one year, the effect in Louisiana would extend to three crop years because of our planting season being 12 to 14 months in advance of harvest, because of the stubble-crop system, and also because sugar is produced at the end of each year and actually marketed in two calendar years; therefore, our insistence upon necessary amendments is reasonable and practicable.

It is generally recognized that an amendment to Section 201 would help to correct the present depression in the price of sugar, which is satisfactory to no one. Such an amendment was adopted by the Senate as part of your Bill, S. 69, and we believe that it would not be difficult to secure agreement as to some reasonable provision which protects the consumer and insures a fair price for the producer.

Of course, our primary interest is in an increased marketing quota, because the present inadequate quota is the cause of practically all of our problems. We do not suggest provision for expansion, which would more properly be considered when a general revision is made of the Sugar Act next year, but in view of the situation in Louisiana and the provisional determination for 1941, we submit that an increase of 50,000 tons would make practical the full enjoyment of the production authorized in the provisional determination and the marketing of the sugar produced thereunder.

The question is always asked as to where to get the sugar when an increase in marketing quota is suggested. As we are not asking for expansion but merely a sufficient additional marketing quota to readjust acreage, without creating difficulties in marketing or being forced to anticipate future reductions in acreage or plow-ups, the amount of sugar involved is practically negligible from the standpoint of total quotas or its possible effect upon other areas. But, if there should be some difficulty in securing even such a trivial concession from other producing areas, we agree with your idea that the surplus of the Philippine quota might be reallocated to the mainland sugar cane area without disturbing the quota of any of the areas which regularly supply the United States market. As you know, the Philippine Islands have a basic quota of 1,029,000 tons, although the limitation in the Philippine Independence Act has restricted them each year to a total duty-free importation which averages about 982,000 tons. The Filipinos prefer not to import sugar on which they would have to pay full-duty tariff. Thus, a potential 47,000 tons of sugar has been available. Under the present provisions of the Sugar Act, this Philippine surplus is reallocated to foreign countries other than Cuba. At times, the actual surplus has been less than 47,000 tons, but it has also been as much as 75,000 tons (1938). For 1940, the Secretary of Agriculture announced last month that the surplus will not be reallocated. The present estimate of consumption for 1940 has reduced the Philippine quota to the limitation in the Philippine Independence Act, and there is actually no surplus this year. Therefore, it cannot be contended that any sugar-producing area has a vested interest in such surplus, and your proposal to transfer this basic quota surplus from the Philippines (who never use it) to the mainland sugar cane area, which needs it and will use it, seems to be a most practical solution. This could be accomplished by an amendment to Section 202, which would make the Philippine quota the same as the limitation in the Independence Act and which would at the same time add the basic quota surplus to the mainland sugar cane area basic quota.

In addition to adjusting the production and marketing of the 1941 crop and because of the subnormal carryover of sugar into 1941, your proposal would make it possible for your Bill, S. 3237, to be adopted. The amount of excess sugar which would be produced from acreage in excess of proportionate shares in 1940 and which now faces a plow-up order is now estimated to be 27,000 tons or less. The following table presents the picture of the marketing situation for Louisiana sugars in 1941, and it demonstrates how with the small increase in marketing quota, a plow-up can be avoided and the marketing of the excess sugar provided for with fairness and equitable treatment for all growers in Louisiana.

Allocating Philippine Excess to the Mainland Cane Area, Estimating Louisiana's Share of Same at 40,000 Tons and Permitting Excess Cane of 1940 to Be Harvested

1940	Short tons, raw sugar
Carryover from 1939	180,000
Production, 1940 (est.)	333,000
Total Supplies, 1940	513,000
1940 Marketing Quota	361,000
Carryover into 1941	152,000
1941	
Carryover from 1940	152,000
Carryover from Excess Cane, if harvested	27,000
Total Carryover	179,000
Production, 1941 (est.)	450,000
Total Supplies, 1941	629,000
1941 Marketing Quota	361,000
Carryover into 1942	267,000
If marketing quota is increased by Philippine excess, which is estimated at	40,000
Carryover into 1942	227,000
Normal Carryover	158,000
Excess over Normal Carryover	69,000

Furthermore, there is prospect that growers who are well situated will process this surplus cane into syrup instead of destroying it. It is estimated that as much as 7,500,000 gallons of syrup would be made, and the result would be to demoralize the syrup market for 100,000 sugarcane growers for syrup in the southern States. In this connection we have received numerous protests from regular syrup producers, and we cannot too strongly ask you to consider this in viewing the entire situation.

I recognize that we are confronted with very serious problems in deciding what is best for all of the sugarcane growers in Louisiana. We are not yet convinced that we should await the 1941 Session of Congress before seeking any amendment whatsoever to

the Sugar Act. We do agree that a general revision of the Sugar Act is impossible at this Session, but in view of all which has been written above, we submit that the provisional determination merely postpones the proper solution of our needs, and we are still hopeful that you may be able to secure the favorable consideration by the Senate, with the approval of the President and of the Secretary of Agriculture, of correcting amendments.

As you have sent copies of your letter to the press, to the County Agents, and to sugarcane farmers, we will also make available to them the results of our studies and discussions up to date.

Appreciating your efforts to help the Louisiana Sugar Industry and assuring you again of our willingness to cooperate with you, I am

Sincerely yours,

FRANK L. BARKER, Chairman,
Legislative Committee,
American Sugar Cane League

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What Did You Do?

The following farmers in St. Martin Parish report following, with some modifications, the land preparation and cultural practices recommended by the Agricultural Extension Division of Louisiana State University:

Mr. Victor A. Gondron on 45.6 acres reports an average acre production of 5015 lbs. or 2.5075 tons of sugar per acre.

Mr. Bertrand Laperouse on 46 acres reports an average acre production of 3781 lbs. or 1.8905 tons of sugar per acre.

Mr. Expadie Laperouse on 58 acres reports an average acre production of 4125 lbs. or 2.0625 tons of sugar per acre.

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Mr. Bourg Answers A Compliment

The following letter is self-explanatory. The Louisiana sugar industry for many years has known and appreciated the sterling work of Clarence J. Bourg, Washington Representative of the American Sugar Cane League. That Mr. Bourg is also appreciated by our friends in the beet sugar states is a compliment to the Louisiana sugar industry as well as to Mr. Bourg.

August 28, 1940

Mr. W. Bert Robinson,
Utah-Idaho Sugar Co.,
Salt Lake City, Utah.

Dear Sir:

I am very grateful for your complimentary letter referring to the article in the August 15th issue of the *Sugar Bulletin*. I merely wrote about the situation as I see it, and I wish that every beet grower and sugarcane grower in the United States would have the opportunity to observe and to understand what is going on in Washington in connection with the sugar program as it has been my privilege to do.

It is very encouraging in the work of representing elements of the domestic sugar industry, and of seeking to secure the proper Government treatment of its members, to receive a gratuitous message of approval from an area which I do not represent directly. I accept your expressions as another indication that the efforts of the continental sugar industry should be united, for the simple reason that we have a common cause, which minimizes completely any small differences suggested by considerations of competition.

I note your statement that "It is unfortunate that every beet growing farmer of the United States cannot have access to this splendid clearly worded, logical, and truthful statement." It will be agreeable to me if you choose to suggest to the editor of the National Beet Grower that pertinent parts of the article might be reproduced in the next issue of his magazine.

Very truly yours,
C. J. Bourg, V. Pres.

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A. G. Bauer
Gillette, Arkansas.

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*This is a voluntary statement for which no compensation of any description was given to Mr. Bauer.

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against Foreign Competition

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Action in Washington

(By C. J. Bourg)

Congress has passed two Resolutions of importance to the Louisiana sugar industry, one being the Cummings Resolution (H. R. 9654) extending the provisions of the Sugar Act for one year, and the other being the Ellender Resolution (S. J. Res. 225) providing for the processing of excess-cane into sugar and including an amendment to Section 201 with regard to the price-control yardstick.

Sugar Act Extended

As explained in the complete statement presented to the Senate Finance Committee by our President, Colonel W. F. Giles, we have been disappointed that the 76th Congress has not made the essential corrections in the sugar program which the experience of growers and producers has shown to be needed to obtain satisfactory results from the administration of the Sugar Act. The opposition of President Roosevelt to a general revision of the Sugar Act during this Session, at the instance of Secretary Henry Wallace and three other members of the Cabinet, created a situation in both the House and in the Senate whereby action was delayed until adjournment became imminent, and the domestic sugar industry was confronted with the choice of extending the law or permitting it to expire at the end of 1940. With market conditions so completely upset by the European War, bringing about a potential surplus of more than 2,000,000 tons of sugar which are normally exported by Pan American countries, it became the consensus of opinion within the domestic industry circles that a lapse of the Sugar Act would create a chaotic condition which few prophets would care to contemplate. Our position was emphasized at the conclusion of the testimony of Colonel Giles, when Senator Vandenberg of Michigan asked whether he was in favor of the extension of the Sugar Act, "with the assurance that there will be a complete exploration of this subject next year?" Having received an affirmative answer from Colonel Giles, Senator Vandenberg declared, "Your attitude is precisely the same as that of the mid-continent beet section. They are completely dissatisfied with many phases of the sugar administration, but there just is not time to correct the situation between now and January; there certainly will be time after January. We are accepting the extension as it is, solely on the theory that there is going to be a correction next year in these obvious inequities in the sugar administration." To which Colonel Giles replied, "That is our position. You have stated it correctly."

Later, when the extension resolution was presented to the Senate by Senator Johnson of Colorado, he declared: "Mr. President, as every Senator knows, the sugar question is involved and complicated. Many Senators desired to change some of the provisions in the sugar law. The Senate committee considering the matter reached the conclusion that it would be better for everyone concerned if we merely extended the 1937 act for another year, and then, when Congress returns next year, to try and work out a sugar bill which might meet the objections made and make the adjustments which those representing the different phases of the sugar industry are demanding."

Other Senators expressed themselves in like manner, and therefore the record plainly shows that the extension is a temporary expedient, and the domestic sugar industry has the assurance that a full consideration of its needs and demands will be given in the next Session of Congress.

In addition to extending the Sugar Act for one

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year so that it will expire on December 31, 1941, both the House and the Senate agreed to an amendment whereby the limitations on the importation of direct-consumption sugar from Hawaii and Puerto Rico have been extended until the expiration of the Act.

At this writing, the President has not yet signed the extending resolution.

Sugar May Be Produced From Excess Cane

The Ellender Resolution is in two sections. Section 1 provides that sugarcane growing on acreage in excess of the proportionate share of the farm may be processed into sugar. No change is made in the proportionate share of any farm with respect to the amount of the conditional payments which is to be made on proportionate-share cane. The Resolution provides that a farmer may market sugarcane for sugar from an additional 10% above the acreage of the proportionate share (or 25 acres, whichever is greater). The farmer does not receive a payment on this additional 10% (or 25 acres), but neither does he suffer any deduction. He is given the right to market this 10% without violating his proportionate-share compliance, but without receiving any Government payment on that additional acreage. Above the 110% (or additional 25 acres) the farmer may harvest 500 acres of sugarcane for sugar, subject to a deduction of $10 for each acre of excess cane. If a farmer has more than 500 acres of excess cane above the 110%, then all such additional acreage may be harvested subject to a deduction of $20 per acre of such excess acreage. Any grower who has a proportionate share of less than 250 acres may market 25 acres of excess cane without penalty. A general example may clarify the effect of the Resolution:

Proportionate Share	500 acres	=100% Payment
10% Excess, Without Penalty	50 acres	=No deduction from 100% Payment
Next 500 Acres		=Deduction of $ 5,000 from Payment
Next 500 Acres		=Deduction of $10,000 from Payment
Third 500 Acres, etc.		=Deduction of $10,000 from Payment

There are several very important questions of administration which may be raised by the provisions of the Ellender Resolution and which may affect each grower who markets sugarcane from excess acreage above his proportionate share. There is a question of whether in the measurement of proportionate-share acres, there will be a physical separation on the farm of excess acres from proportionate-share acres. There is also the question whether seed cane can be selected from any acreage on the farm, or whether seed cane acreage must be designated by the farmer. It is possible that the farmer may prefer to use certain sugarcane for processing into sugar, based upon the condition of the cane at the time of harvest, and the question may arise as to whether acreage measured for proportionate-share cane may be used for seed acreage or excess acreage. This will become important when determining which deliveries of cane are to be credited against proportionate shares, which will form the basis of conditional payments under the Sugar Act. As far as possible, these questions ought to be answered in advance of harvest, but decisions have been delayed pending the President's signature to the Ellender Resolution. Now that the President has signed the Resolution, making it law, it is recommended that all questions of administration should be discussed fully with representatives of the State Agricultural Committee at Baton Rouge, so that doubts may be removed and difficulties avoided prior to instructions being issued to Parish Committees concerning any changes in administrative procedure, which may be made necessary by the provisions of the Ellender Resolution, in connection with compliance.

There is a proviso in the Ellender Resolution which states that in no case should the total production of Louisiana and Florida exceed 505,000 tons for 1940, and the following letter has been written by the Chief of the Sugar Division in explanation of this provision and the probable administration thereof:

'Reference is made to your request for information as to the general procedure which the Department would follow in carrying out the bill relating to excess proportionate share cane acreage in the mainland sugarcane area (S. J. Res. 225), passed by the Senate on September 30, 1940.

'It would be necessary, in the first place, for a determination to be issued by the Secretary of Agriculture, as soon as possible after the bill is enacted, that the production from the 1940 crop acreage will not exceed the estimated production of "the 1940 proportionate share acreage of 505,000 tons", as provided by the pending bill. Since on the basis

of the last report of the United States Reporting Board the production of the proportionate share acreage in Louisiana and Florida is expected to be approximately 418,000 tons of sugar as compared with the above-mentioned figure of 505,000 tons, there is a margin of 87,000 tons of sugar to cover production from any excess acreage to be harvested under the provisions of the pending bill, and there would appear to be no difficulty in issuing such determination.

'Since harvesting of the 1940 mainland sugarcane crop is about to begin, producers would have to be advised immediately after the passage of the bill of its provisions and that they may harvest the excess acreage without loss of benefit payments on their established proportionate share acreage in accordance with the tolerance factor and deductions provided for in the bill.

'You will readily appreciate that the proposed bill affords a remedy which in the past has been greatly desired by the Florida interests for the acreage now in cane is in excess of their proportionate shares. The bill will also protect sirup producers of Florida and other states who without the passage of the bill would be adversely affected by the conversion of the excess cane acreage into sirup.'

Congress Agrees Sugar Prices Too Low

The amendment to Section 201 will probably have no effect upon the price in 1940, but the adoption by Congress of this change is definitely proof that Congress agrees with the sugar industry that the price of sugar is depressed below the level which is necessary to maintain the domestic sugar industry as a whole. The change is explained by Senator O'Mahoney in a letter addressed by him to the Secretary of Agriculture, wherein he states in part: "The language of this amendment would not change any purpose Congress and the Department had in mind when drafting the Sugar Act of 1937 but would merely clarify the intent of Congress and permit the Department to administer the law in accordance with that intent. It would also afford complete protection to consumers of sugar from any danger of unnecessarily low quotas. Section 201 is the key provision of the act by which the supply and quotas and therefore the price of sugar are determined. As you know, the act makes it the duty of the Secretary to determine for each calendar year the amount of sugar needed to meet the requirements of consumers in the continental United States. But, his discretion is controlled by a specific statistical formula which is set out in the law. To guard against unduly low estimates of consumption which might have the effect of penalizing consumers, Congress then provided that the Secretary 'may make such additional allowances as he may deem necessary * * * so that the supply of sugar made available under this act shall not result in average prices to consumers in excess of those necessary to maintain the domestic sugar industry as a whole.' To this provision is attached another clause which declares that 'the amounts of such additional allowances shall be such that in no event will the amount of the total supply be less than the quantity of sugar required to give consumers of sugar * * * a per capita consumption equal to that of the average of the 2-year period 1935-36.'

"This latter clause has been interpreted to prevent the Secretary from taking into consideration any excess carry-over of sugar stocks in making an additional allowance when the section is called into operation. It has the effect therefore of requiring the Secretary to make his allowances without regard to the actual existence of such an excess carry-over.

"The question of interpretation of section 201 first arose in March 1938 when it became apparent that the estimate of consumption made in the previous December, namely, 6,861,761 tons, was too high and would have to be revised downward. On June 9, 1938, it was cut to 6,780,566 tons, which was the actual per capita average of the 2-year period 1935-36. This was a reduction of 81,195 tons but there was an actual excess carry-over of 141,000 tons so that 'to maintain the domestic sugar industry as a whole' the total reduction should have been 222,195 tons.

"This reduction could have been made without injury to the consumer. The failure to make it, however, had a depressing effect upon the price of sugar and was, therefore, injurious to every branch of the sugar industry. If the law, as interpreted, had permitted the Secretary to take into account the excess carry-over the reduction would have been made and the adverse effect upon price would have been avoided.

"The amendment which I propose would correct this defect. First, by making it possible to take the excess carry-over into consideration, and second, by basing the per capita consumption standard upon the 2-year period 1937-38 rather than the 2-year period 1935-36. The average of 1935-36 was 104.23 and of 1937-38, 102.63."

To date there has been no reply from the Secretary of Agriculture, but there is a letter from the Chief of the Sugar Division to Congressman Cummings of Colorado which is pertinent and confirms the understanding expressed in the Senator's letter:

'Reference is made to your request for information as to the meaning of the phrase "after allowance for normal carry-over" in the following amendment passed by the Senate yesterday (September 30, 1940):

> '"Sec. 2. The last clause of section 201 of the act approved September 1, 1937, is amended to read as follows: 'and in order that the regulation of commerce provided by this act shall not result in excessive prices to consumers, the Secretary shall make such additional allowances as he may deem necessary in the amount of sugar determined to be needed to meet the requirements of consumers, so that the supply of sugar made available to consumers shall not result in average prices to consumers in excess of those necessary to maintain the domestic sugar industry as a whole. The amount of such additional allowances shall not be less than the amount required, after allowances for normal carry-over, to give consumers in the United States a per capita consumption equal to the average of the 2-year period 1937-38.'"

'It is our understanding that the phrase "after allowances for normal carry-over" in the above amendment would mean an allowance for a deficiency or surplus in carry-over.'

Hours Exemption Extended to Direct-Consumption Sugar

An interpretation as to the extent of the statutory overtime exemption in the Fair Labor Standards Act for the processing of direct-consumption sugar was issued on Oct. 11th by Colonel Philip B. Fleming,

(Continued on page 4)

Administrator of the Wage and Hour Division, U. S. Department of Labor.

The processing of so-called "direct-consumption sugar," according to the interpretation, is entitled to the exemption provided under Section 7(c) of the Act for the "processing of . . . sugar cane . . . into sugar (but not refined sugar)."

"Generally speaking," the interpretation states, "sugar cane mills process sugar cane into raw sugar, which is later sold to refiners who produce refined sugar. In some mills, however, the sugar cane processed by a continuous process into sugar is ready for consumption, although it is not precisely the same as refined sugar.

"It seems clear from the legislative history of Section 7(c) that in denying an exemption to the refining of sugar, Congress had in mind the year-round refineries that buy molasses, syrup, or raw sugar and convert them into refined sugar. It did not intend to exclude from the exemption these seasonal operations performed upon sugar cane and resulting in 'direct-consumption sugar', which are entirely like the operations by which so-called raw sugar is produced.

"However, at any time that a mill purchases raw sugar and refines such sugar along with making 'direct-consumption sugar' produced from cane, the exemption is not applicable."

Text of Resolution Extending Sugar Act

AN ACT

To extend, for an additional year, the provisions of the Sugar Act of 1937 and the taxes with respect to sugar.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that section 513 of the Sugar Act of 1937 (relating to termination of powers of the Secretary of Agriculture under the Sugar Act) is amended to read as follows:

"Sec. 513. The powers vested in the Secretary under this Act shall terminate on December 31, 1941, except that the Secretary shall have power to make payments under title III under programs applicable to the crop year 1941 and previous crop years."

Sec. 2. Section 3508 of the Internal Revenue Code (relating to termination of taxes under the Sugar Act) is amended to read as follows:

"SEC. 3508. TERMINATION OF TAXES.

"No tax shall be imposed under this chapter on the manufacture, use, or importation of sugar after June 30, 1942."

Sec. 3. Section 503 of the Sugar Act of 1937 (relating to payments to the Commonwealth of the Philippine Islands) is amended by striking out "June 30, 1941" and inserting in lieu thereof "June 30, 1942".

Sec. 4. Subsection (b) of section 207 of the Sugar Act of 1937 (relating to direct-consumption sugar from Puerto Rico) is amended by adding at the end thereof the following new sentence: "This subsection is hereby extended so that not more than one hundred and twenty-six thousand and thirty-three short tons, raw value, of the quota for Puerto Rico for any calendar year may be filled by direct-consumption sugar: Provided, however, That the amount of said quota which may be filled by direct-consumption sugar for the calendar year 1940 shall not be less than the quantity of direct-consumption sugar from Puerto Rico actually brought into the continental United States, for consumption therein, after December 31, 1939, and up to and including the date of the enactment of this amendatory sentence."

Sec. 5. Subsection (a) of section 207 of the Sugar Act of 1937 (relating to direct-consumption sugar from Hawaii) is amended by adding at the end thereof the following new sentence: "This subsection is hereby extended so that not more than twenty-nine thousand six hundred and sixteen short tons, raw value, of the quota for Hawaii for any calendar year may be filled by direct-consumption sugar: Provided, however, That the amount of said quota which may be filled by direct-consumption sugar for the calendar year 1940 shall not be less than the quantity of direct-consumption sugar from Hawaii actually brought into the continental United States, for consumption therein, after December 31, 1939, and up to and including the date of the enactment of this amendatory sentence."

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Ellender Resolution Covering Excess Cane

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

Sec. 1. That no payment under the Sugar Act of 1937 with respect to the 1940 crop shall be withheld from any producer in the mainland cane-sugar area, because of the marketing (or processing) of sugarcane in excess of the proportionate share for the farm, if the acreage of sugarcane grown on the farm and marketed (or processed) for sugar in the crop year 1940 is not in excess of the acreage of sugarcane for sugar planted prior to January 1, 1940, but payments shall be made only with respect to the proportionate share acreage established for the farm under the provisions of such act, and the following deductions shall be made from such payments, on account of any acreage of sugarcane grown on the farm and marketed (or processed) for sugar in the crop year 1940 which is in excess of (1) 110 percent of the proportionate share for the farm, or (2) the proportionate share for the farm plus 25 acres whichever is the greater; for so much of such excess as does not exceed 500 acres, a deduction of $10 per acre; for so much of such excess as exceeds 500 acres, a deduction of $20 per acre: Provided, That the foregoing provision shall be effective only if the Secretary determines that the actual production from the 1940 crop shall not exceed the estimated production of the 1940 proportionate share acreage of 505,000 tons.

Sec. 2. The last clause of section 201 of the act approved September 1, 1937, is amended to read as follows: "and in order that the regulation of commerce provided by this act shall not result in excessive prices to consumers, the Secretary shall make such additional allowances as he may deem necessary in the amount of sugar determined to be needed to meet the requirements of consumers, so that the supply of sugar made available to consumers shall not result in average prices to consumers in excess of those necessary to maintain the dometic sugar industry as a whole. The amount of such additional allowances shall not be less than the amount required, after allowance for normal carry-over, to give consumers in the continental United States a per capita consumption equal to the average of the 2-year period, 1937-38."

Resume of Results of Sugarcane Variety Tests During 1939

By George Arceneaux, Agronomist, R. T. Gibbens, Jr., Assistant Agronomist,[1] and C. C. Krumbhaar, Agent, Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture.

This report summarizes briefly the results of tests of sugarcane varieties conducted by the U. S. Department of Agriculture in Louisiana during 1939. The scope of the work and the methods employed in conducting the experiments were essentially as in previous years. The results are quite generally in agreement with ones previously obtained and published.

Extensive comparisons of Co. 290 and C. P. 29/116 on light soils place the latter approximately on a par with Co. 290 in yield of cane per acre but somewhat inferior to Co. 290 in yield of sugar per ton of cane.

Co. 281 now grown almost exclusively for windrowing purposes again proved the least productive of varieties now in extensive commercial culture. The observed average yield of sugar per acre from this variety approximating 4000 pounds below that from C. P. 29/320 and nearly 7000 pounds below that from Co. 290 in the aggregate of plant cane, first and second stubble crops emphasizes the importance of keeping the acreage devoted to Co. 281 down to minimum proportions consistent with expected windrowing requirements.

1. Resigned March 15, 1940.

Among early maturing varieties C. P. 28/19 gave consistently the highest yields of sugar per ton of cane, while C. P. 29/320 gave the highest average yield of sugar per acre in tests on light soils.

A study of the yield data assembled according to the three well recognized sections of the Sugarcane District viz., the southeastern parishes, southwestern parishes and northeastern parishes, reveals important differences in varietal performance between different sections. Co. 290 and C. P. 28/11 gave their highest, while Co. 281 and C. P. 28/19 gave their lowest relative yields of cane per acre in the southwestern parishes. C. P. 28/19 and C. P. 29/320 gave their highest and Co. 290 and C. P. 28/11 gave their lowest relative yields of sugar per ton of cane in the northeastern parishes.

In tests on heavy soils C. P. 29/116 equaled the standard variety Co. 290 in yield of sugar per ton of cane as well as in yield of cane per acre. C. P. 28/11 surpassed Co. 290 by an average of approximately 15 pounds of sugar per ton of cane but gave approximately 3500 pounds of sugar per acre less than Co. 290 in the aggregate of plant cane, first and second stubble crops. C. P. 28/19 proved on the whole distinctly less satisfactory than C. P. 28/11.

In plant cane tests at Houma the varieties Co. 290, C. P. 28/11, C. P. 28/19 and C. P. 29/116 planted on August 1 yielded at an average rate of approximately four tons of cane per acre and approximately 18 pounds of sugar per ton of cane more than obtained from comparable plantings made on October 1. First stubble yields were found approximately the same from plantings made at the two dates.

In trials on muck soil C. P. 28/19 again led all other varieties tested in yield of sugar per ton of cane as well as in yield of sugar per acre. C. P. 29/320 and C. P. 28/11 afforded on the whole cane of acceptable commercial quality but were both greatly below C. P. 28/19 in yields of sugar per ton of cane and per acre. Confirming results obtained during previous years, Co. 281 did not mature satisfactorily in tests on muck soils and cannot be recommended for culture on soils of this type.

The new C. P. seedlings 29/137, 31/509, 32/206, 33/224, 33/243 and 33/253 have shown some promise in preliminary tests but more extensive field trials will have to be made before the relative merits of these seedlings can be accurately determined.

Warning With Respect to Employment of Child Labor During the Sugarcane Harvest This Year

Section 301 (a) of the 1937 Sugar Act has this to say with respect to child labor:

"That no child under the age of fourteen years shall have been employed or permited to work on the farm, whether for gain to such child or any other person, in the production, cultivation, or harvesting of a crop of sugar beets or sugarcane with respect to which application for payment is made, except a member of the immediate family of a person who was the legal owner of not less than 40 per centum of the crop at the time such work was performed; and that no child between the ages of fourteen and sixteen years shall have been employed or permitted to

do such work, whether for gain to such child or any other person, for a longer period than eight hours in any one day, except a member of the immediate family of a person who was the legal owner of not less than 40 per centum of the crop at the time such work was performed."

A number of growers had their benefit payments for 1939 withheld because of violations of the above provisions in the Sugar Act. The growers finally were able to receive the withheld payments under certain provisions embodied in a Senate Act (S. 3237) introduced and sponsored by Senator Allen J. Ellender, viz:

"An Act

To amend Section 301 (a) of the Sugar Act of 1937.

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That subsection (a) of section 301 of the Sugar Act of 1937 is amended by adding at the end thereof the following: 'The Secretary is authorized to make payments, notwithstanding a failure to comply with the conditions provided in this subsection, but the payments made with respect to any crop shall be subject to a deduction of $10 for each child for each day, or a portion of a day, during which such child was employed or permitted to work contrary to the foregoing provisions of this subsection, in the 1937, 1938, and 1939 crops.' "

It will be noticed that this amendment specifies the years 1937, 1938 and 1939. It does not apply to what may happen during the 1940 harvest and all are urged to be most careful that they do not (either intentionally or unintentionally) use child labor contrary to Section 301 (a) of the 1937 Sugar Act because if they do they will certainly forfeit whatever benefit or adjustment payment that may accrue to them through their compliance with the Act.

Definition of Marketing Under The Sugar Act of 1937

(*Official Release*)

1. A marketing of sugar shall be deemed to have occurred when delivery of the sugar is made against a *bona fide* sales contract.

2. Any of the following shall be deemed to constitute delivery:

(a) Actual delivery by the seller or his agent:

(1) Actual delivery of the sugar to the buyer; or

(2) actual delivery of the sugar to a common carrier for transportation to the buyer, whether or not such transportation involves subsequent transshipment by means of another such carrier.

(b) Constructive delivery by the seller or his agent:

(1) Delivery to the buyer of a negotiable or non-negotiable warehouse receipt, or custodian's storage receipt, representing the sugar; or

(2) acknowledgment that the sugar is held for and on behalf of the buyer.

(c) Actual delivery by the warehouseman or the custodian:

(1) Actual delivery of the sugar to the buyer; or

(2) actual delivery of the sugar to a common carrier for transportation to the buyer whether or not such transportation involves subsequent transshipment by means of another such carrier.

(d) Constructive delivery by the warehouseman or the custodian:

(1) Issuance to the buyer of a negotiable or non-negotiable warehouse receipt, or a custodian's receipt, representing the sugar; or

(2) other acknowledgment that the sugar is held for and on behalf of the buyer.

3. Delivery of sugar shall be evidenced as follows:

(a) By the seller or his agent—actual delivery to the buyer shall be evidenced by the buyer's written receipt thereof; actual delivery to a common carrier for transportation to the buyer shall be evidenced by a copy of the bill of lading, or other shipping receipt, issued by a common carrier; delivery to the buyer of a negotiable or non-negotiable warehouse receipt, or a custodian's storage receipt, shall be evidenced by the buyer's written receipt thereof; and an acknowledgment that the sugar is held for and on behalf of the buyer shall be evidenced by the buyer's written receipt of the notice of such acknowledgment; and

(b) by the warehouseman or custodian—actual delivery to the buyer shall be evidenced by the warehouse or custodian delivery advice accompanied by a copy of the buyer's written receipt to the warehouseman or custodian; actual delivery to a common carrier for transportation to the buyer shall be evidenced by the warehouse or custodian delivery advice accompanied by a copy of the bill of lading, or other shipping receipt, issued by a common carrier; issuance to the buyer of a negotiable or non-negotiable warehouse receipt, or custodian's receipt, representing the sugar shall be evidenced by the warehouse or custodian delivery advice showing the number of such receipt and to whom issued; and any other acknowledgment that the sugar is held for and on behalf of the buyer shall be evidenced by the warehouse or custodian delivery advice accompanied by the original or a copy of the buyer's written receipt of such acknowledgment.

4. A sales contract shall be deemed to be a *bona fide* contract if, in accordance with the foregoing:

(a) Actual delivery of the sugar is made under the contract during the quota year;

(b) constructive delivery of the sugar is made under the contract which permits actual delivery during the quota year and actual delivery is made by January 31 of the following year;

(c) constructive delivery of the sugar is made under the contract which permits actual delivery during the quota year and the sugar is paid for in cash by January 31 of the following year; or

(d) constructive delivery of the sugar is made under the contract which permits actual delivery during the quota year and not less than 25% of the sugar is actually delivered, or not less than 25% of the purchase price of the sugar is paid in cash, by January 31 of the following year, provided the entire amount of the sugar is actually delivered to the buyer and paid for in full.

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Washington Developments

(By C. J. Bourg)

There have been several determinations and announcements made by the Secretary of Agriculture recently in connection with the sugar program, all of which are of sufficient importance to be discussed and to be reprinted in full for the benefit of our members.

Normal Yield

In view of the possibility of some acreage abandonment by growers of sugar cane in certain districts, it should be pointed out that the basis for determining abandonment and deficiency payments has been changed by the following determination:

Extract from Federal Register, Oct. 24, 1940

"Determination of (1) Normal Yield of Commercially Recoverable Sugar per Acre and (2) Eligibility for Payment with Respect to Abandonment and Crop Deficiency for Farms in the Mainland Cane Sugar Area.

"Pursuant to the provisions of section 303 of the Sugar Act of 1937, I, Claude R. Wickard, Secretary of Agriculture, do hereby make the following determination:

"802.25 Normal yield of commercially recoverable sugar per acre and eligibility for payment with respect to abandonment and crop deficiency for farms in the mainland cane sugar area—(a) Normal yield calculation. The normal yield of commercially recoverable sugar per acre for any farm in the mainland cane sugar area in which sugarcane is grown and marketed (or processed by the producer) for the extraction of sugar shall be:

"(1) the average number of hundredweights of commercially recoverable sugar per acre of sugarcane harvested on the farm and marketed (or processed by the producer) for the extraction of sugar during the crop years of 1937-38, 1938-39 and 1939-40 (as shown on applications for payment under the mainland sugarcane programs), if sugarcane for sugar was harvested on the farm in all of such crop years, or

"(2) the average number of hundredweights of commercially recoverable sugar per acre of sugarcane harvested on farms in the community in which the farm is located and marketed (or processed) for the extraction of sugar during the crop years 1937-38, 1938-39, and 1939-40, if sugarcane for sugar was not harvested on the farm in all of such years.

"(b) Eligibility for abandonment and deficiency payments. Any farm located in a parish or county in which the actual yields of commercially recoverable sugar from the sugarcane for farms comprising 10 per cent or more of the acreage of such sugarcane were 80% or less of the normal yields therefor, because of drought, flood, storm, freeze, disease or insects, shall be eligible for abandonment and deficiency payments: Provided, however, that any farm which is located outside of, but adjacent to, a parish or county in which the foregoing requirement is met, and in which conditions affecting sugarcane culture are similar to conditions prevailing in such parish or county, as certified by the State Agricultural Conservation Committee, shall also be eligible for abandonment and deficiency payments.

"This determination supersedes the 'Determination of (1) Normal Yield of Commercially Recoverable Sugar Per Acre and (2) Eligibility for Payment with Respect to Abandonment and Crop Deficiency for Farms in the Mainland Cane Sugar Area, Pursuant to Section 303 of the Sugar Act of 1937,' issued December 22, 1938."

A careful reading of the determination makes it clear that the main purpose is to bring into consid-

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The American Cane Growers' Assn.
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eration the performance of the more recent years, when determining the normal yield of sugar per acre. In previous years the normal yield has been based upon the yields of 1935 and 1936. Under the above determination proper weight will be given to the more satisfactory yield performance of 1937, 1938 and 1939. As a result, the basis of abandonment and deficiency payments has been made more favorable to the sugar-cane grower.

Another improvement is in connection with the interpretation of "the local producing area" affected by the cause of abandonment or deficiency. The Sugar Division has recognized the geographical limits of each parish but they have extended the area to any section adjacent to the parish which has been similarly affected. There have been cases in previous years when a storm or flood has affected several parishes, but in one parish the loss would not amount to 10% and was not considered sufficient to justify abandonment or deficiency payments, even though in the adjacent parish payments were made because the loss was greater in the parish as a whole. This has resulted in complaints about discrimination, which the grower found it difficult to understand. For instance, some years ago there was a storm which passed through Terrebonne Parish and the upper part of Lafourche Parish. The loss was considerable wherever the storm passed, but the total loss in Terrebonne Parish was more than 10% and therefore sufficient to make growers in that parish (on the west side of Bayou Bleu) eligible for payments. The loss in Lafourche Parish as a whole was not 10% and the growers in the parish (on the east side of Bayou Bleu) were not eligible for payment. Thus neighbors living within a stone's throw of each other were treated differently. Under the new interpretation the local producing area has been extended to embrace all adjacent territory regardless of parish lines and it will guarantee equal treatment to all growers affected by storms, freezes or other acts of God enumerated in Section 303.

Refining in Bond

The following press release issued by the Sugar Division has been very satisfactory and encouraging news for those of the domestic sugar industry (including the American Sugar Cane League) who have been insisting for many years that refiners should not be given the free use of this privilege.

"Sugar Division Announces Amendment of Regulations on Entry of Sugar for Re-Export"

"The Sugar Division of the Agricultural Adjustment Administration today announced that starting October 31, 1940, sugar or liquid sugar imported into continental United States under bond for the purpose of being processed and re-exported as sugar or liquid sugar is not to be released from United States Customs control until an equivalent amount of quota sugar is delivered to customs authorities. Upon proof of exportation of the bonded sugar or its equivalent, the corresponding amount of quota sugar held in customs custody will be returned to the refiner.

"Moreover, beginning October 31 no sugar or liquid sugar is to be released from customs custody for the sole purpose of being processed and returned thereto, unless the Secretary of Agriculture or his authorized agent has determined that such sugar is damaged and in danger of deterioration.

"There regulations temporarily amend those issued September 29, 1937. The amendments cease to be effective at the end of the current year, unless terminated sooner by the Secretary."

The interest of the Louisiana grower and raw sugar producer in this announcement, concerns itself chiefly with the fact that the practice of refining in bond has been and can be easily used for the purpose of depressing the price of raw sugar in the United States markets. The requirement has been that raw sugar which is refined in bond must be restored to customs custody within thirty days. This has happened: A refiner desiring to pay less than the current market price for raw sugar under the quota, decides to buy over-quote sugar at a reduced price in November or December. Of course he is not supposed to market for consumption any over-quota sugar, but by refining in bond during December the refiner has the advantage of delivering the sugar so refined during December and then in January, within thirty days after removing the raw sugar from customs custody, he can deliver back into customs custody sugar of the succeeding year's quota. Quite obviously this defeats the fundamentals of the quota system, but the privilege has been allowed in the past because of claims by certain refiners that there would be local shortages in certain metropolitan districts unless over-quota sugar was made available in December. It must be recognized that operators could get control of all available raw sugar at the end of a year and create a "market freeze" and certainly we would not encourage this practice nor do we think it should be allowed to happen. But on the other hand we are

greatly pleased to see that the Sugar Division has finally recognized that the granting of this privilege just at a time when the Louisiana and other continental groups are coming on the market, has caused unnecessary losses to growers and producers of raw sugar. There are already too many trade manipulations which affect the price of Louisiana raw sugar and we are grateful that the Department of Agriculture has notified refiners in advance so that at least our raw sugar producers will not have this condition to combat in 1940. We have never contended that the quota system should give any exclusive advantage to Louisiana producers of raw sugar and it is obvious that there is enough competition among these producers so that the Louisiana crop will be readily available to refiners at the actual market price, at least to the extent that marketing allotments permit the sale of sugar under the quota. But we have always contended that the sale of over-quota sugar from off-shore areas in the Fall months is as much disadvantage as our continental producers should suffer, without permitting such over-quota sugar to be both refined and delivered for consumption in December when Louisiana raws are available in volume at the actual market prices. No one can overlook the fact that Louisiana over-quota raw sugar cannot be delivered without being charged against the quota of the current year, even though it may be bought in the Fall months. There can be no refining in bond, because Louisiana sugar does not go into customs custody and besides the definition of marketing makes it impossible to sell and deliver over-quota sugars above the limit of the marketing allotment which each processor receives. Therefore, we express public appreciation of this constructive action, even though it is belated, and we sincerely express the hope that it is indicative of an improvement in administrative policy under the sugar program for the future.

Determination of Fair and Reasonable Prices for the 1940 Crop of Mainland Sugarcane for Sugar

Whereas section 301 (d) of the Sugar Act of 1937, approved September 1, 1937, provides, as one of the conditions for payment to producers of sugar beets and sugarcane, as follows:

That the producer on the farm who is also, directly or indirectly, a processor of sugar beets or sugarcane, as may be determined by the Secretary, shall have paid, or contracted to pay under either purchase or toll agreements, for any sugar beets or sugarcane grown by other producers and processed by him at rates not less than those that may be determined by the Secretary to be fair and reasonable after investigation and due notice and opportunity for public hearing.

Whereas the Secretary of Agriculture held public hearings in Louisiana and Florida for the purpose of receiving evidence likely to be of assistance to him in determining fair and reasonable prices for the 1940 crop of mainland sugarcane for sugar:

Now, therefore, I, Paul H. Applebly, Acting Secretary of Agriculture, after investigation and consideration of the evidence obtained at the aforesaid hearings and all other information before me, do hereby make the following determination:

Section 802.22f (a) *Fair and reasonable prices for the 1940 crop of Florida sugarcane for sugar.* Fair and reasonable prices for the 1940 crop of Florida sugarcane shall be not less than the prices set forth in the existing Standard Florida Sugarcane Purchase Contract with cooperative participation supplement.

(b) *Fair and reasonable prices for the 1940 crop of Louisiana sugarcane for sugar.* Fair and reasonable prices for the 1940 crop of Louisiana sugarcane shall be (when the price of 96° raw sugar, duty-paid basis, is 3½ cents per pound) not less than $1.00 per ton of standard sugarcane for each 1 cent of the average price per pound of raw sugar determined in accordance with whichever of the following options is agreed upon: (1) the average of the weekly qutations of 96° raw sugar, duty-paid basis, on the Louisiana Sugar & Rice Exchange and the Cane Products Trade Association Exchange for the week in which such sugarcane is delivered; or (2) the simple average of the weekly quotations of 96° raw sugar, duty-paid basis, on the Louisiana Sugar & Rice Exchange and the Cane Products Trade Association Exchange for the weeks from Friday, October 11, 1940 (or the Friday within the first marketing week of actual trading) to March 27, 1941, except that, if in any week or weeks, because of inadequate volume or other factors, such weekly averages are found by the Chief of the Sugar Division not to reflect the true value of such sugar, the simple average for such week or weeks of the daily spot quotations of 96° raw sugar, duty-paid basis, as announced by the sugar committee of the New York Coffee & Sugar Exchange, or of such other prices of 96° raw sugar, duty-paid basis, as the Chief of the Sugar Division may find to be necessary, shall be substituted for the said Louisiana weekly averages in determining the average price for the marketing period: *Provided, however,* (i) That for each decline of ¼ cent in the price of 1 pound of 96° raw sugar, duty-paid basis, below 3.50 cents per pound, the price of standard sugarcane shall be reduced by not more than 3 per centum, with intervening prices in proportion, unless the price of sugar falls below 2.75 cents, in which case no further reduction shall be made;

(ii) That for an advance of ¼ cent in the price of 1 pound of 96° raw sugar, duty-paid basis, above 3.50 cents per pound, the price of standard sugarcane shall be increased by not less than 3 per centum, with intervening prices in proportion, unless the price of raw sugar exceeds 3.75 cents per pound, in which case settlement shall be made on the basis of $1.03 for each 1 cent of the price;

(iii) That the premiums paid for sugarcane of the 1940 crop containing more sucrose in the normal juice than that defined as standard sugarcane shall be not less than those paid during the 1939 crop year;

(iv) That the discounts applicable to sugarcane of the 1940 crop containing less sucrose in the normal juice than that defined as standard sugarcane shall be not greater than those applied in connection with the 1939 crop; and

(v) That deductions based upon decreased boiling house efficiency may be made for frozen sugarcane accepted by the processor (it being understood that cane shall not be considered as frozen even after being subjected to freezing temperature unless and until there is evidence of damage having taken place be-

cause of the freeze) at a rate not in excess of 3.775 per centum of the payment, computed as aforesaid, for each 0.25 cc. of acidity above 2.25 cc. but not in excess of 4.50 cc. (analyzed in accordance with the established methods of the area, with intervening fractions computed to the nearest multiple of 0.05 cc.)

(c) *Definitions and general provisions.* For purposes of subsection (b):

(1) Standard sugarcane shall be sugarcane containing no more sucrose in the normal juice than was defined as standard sugarcane by the processor in his sugarcane purchase contract, or contracts, verbal or written, used in the year 1939.

(2) Costs, such as hoisting and weighing of sugarcane, shall be absorbed by the processor, except in those instances in which the processor operated in 1936 and did not bear such costs in that year; but nothing in this paragraph shall be construed as prohibiting negotiations with respect to the level of such costs, subject, upon appeal, to review by the Secretary of Agriculture or his authorized agent, in the event of changes alleged to be unfair to either the producer or the processor.

(3) Where the only available practicable means of transportation are rail facilities and the distance to the nearest factory is in excess of 50 miles, the cost of transportation may, by mutual consent of the interested parties, and subject, upon appeal, to review by the Secretary of Agriculture or his authorized agent, be shared by the processor and the producer.

(4) The processor shall not, through any subterfuge or device whatsoever, reduce the returns from the 1940 crop of Louisiana sugarcane to the producer below those determined above. (Sec. 301, 50 Stat. 909; 7 U.S.C., Supp. V, 1131).

Done at Washington, D. C., this 26th day of October, 1940. Witness my hand and the seal of the Department of Agriculture.

PAUL H. APPLEBY, Acting Secretary.

Sugar Division Announces Minimum Wages For Harvesting 1940 Mainland Cane Crop

(Official Release)

The Sugar Division of the Agricultural Adjustment Administration announced October 22nd the minimum wages to be paid laborers in the harvesting of the 1940 crop of sugarcane in the mainland cane area, comprising Louisiana and Florida, during the period Sept. 1, 1940-June 30, 1941, by producers who apply for conditional payments under the Sugar Act of 1937. The Act provides, among other conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugarcane be paid in full for all such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable.

The determination does not change the rates established for the harvesting of the 1939 crop in Florida. The Louisiana harvesting wages on a day basis are the same as last year. The Louisiana piece rates for small barrel green cane are the same as the rates for all cane last year, but somewhat lower rates have been established for cutting and loading large barrel cane. A lower rate for cutting both small and large barrel burnt cane also has been provided. The establishment of differential rates for several types of cane in Louisiana is in keeping with the practice followed in Florida.

Producers are required, as in prior years, to furnish laborers without charge the accessories customarily furnished, such as a habitable house, a suitable garden plot with facilities for cultivation, pasturage for livestock, medical attention, and similar incidentals.

The determination was issued following public hearings held in Louisiana and Florida in July and August and after investigation, as required in the Act.

Summary of Basic Wage Rates

The basic wage rates for both male and female workers provided in the determination are as follows:

LOUISIANA

(a) *Day Rates*:

(1) For cutting, topping, and stripping sugarcane: Adult male workers, not less than $1.50 per day of 9 hours; adult female workers, not less than $1.20 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 17 cents per hour for adult male workers and 13 cents per hour for adult female workers.

(2) For loading sugarcane, not less than $1.80 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 20 cents per hour.

(3) For cutting and loading sugarcane as a combined operation, not less than $1.60 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 18 cents per hour.

(b) *Tonnage Rates*:

(1) For green sugarcane, not less than the following rates per ton:

Variety of Sugarcane	Cutting, topping, and stripping sugarcane	Loading Sugarcane	Cutting and loading as combined operation
Co. 290, C. P. 29-103 or C. P. 29-116 (large barrel)	$0.65	$0.15	$0.80
All other varieties	.75	.20	.95

(2) For burnt sugarcane, not less than the following rates per ton:

Variety of Sugarcane	Cutting and topping Sugarcane	Loading Sugarcane	Cutting and loading as combined operation
Co. 290, C. P. 29-103 or C. P. 29-116 (large barrel)	$0.50	$0.15	$0.65
All other varieties	.55	.20	.75

FLORIDA

(c) *Day Rates*:

For cutting, topping and stripping sugarcane: Adult male workers, not less than $2.00 per day of 9 hours; adult female workers, not less than $1.60 per day of 9 hours. For a working day longer or shorter than 9 hours the rate is to be not less than 22.5 cents per hour for adult male workers and 18 cents per hour for adult female workers.

(d) *Tonnage Rates*:

For cutting and loading sugarcane as a combined operation, not less than the following rates per ton:

Type of Sugarcane	Green Sugarcane	Burnt Sugarcane
Small barrel	$1.19	$0.97
Medium barrel	.97	.81
Large barrel	.81	.65

LOUISIANA AND FLORIDA

(e) *Rates for other harvesting operations*:

(1) Tractor drivers, truck drivers, and operators of

mechanical loading equipment, not less than $1.85 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 21 cents per hour.

(2) Teamsters, not less than $1.75 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 20 cents per hour.

(3) Grabmen, not less than $1.80 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 20 cents per hour .

(4) Hoist operators, not less than $1.60 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 18 cents per hour.

(5) Other harvesting operations not specifically provided for above: For adult male workers, not less than $1.25 per day of 9 hours; for adult female workers, not less than $1.00 per day of 9 hours. For a working day longer or shorter than 9 hours, the rate is to be not less than 14 cents per hour for adult male workers and 11 cents per hour for adult female workers.

(f) *Rates for harvesting operations performed by children*:

(1) For children between the ages of 14 and 16 years, the rate per day of 8 hours (maximum hours per day for such children) is to be not less than three-fourths of the rates established above for adult male workers for a 9-hour day. For a working day shorter than 8 hours, the rate is to be in proportion.

(2) The piece rates for children between the ages of 14 and 16 years is to be the same as those established above for adults (except that such children are not to be so employed or permitted to work for more than 8 hours per day).

The piece rate for a particular harvesting operation calculated on a basis other than prescribed in the determination is to be such as to provide earnings per 9-hour day or per hour of not less than the daily or hourly earnings specified for such operation.

In the event producers have agreed to pay wages higher than those specified in the determination they will not qualify for conditional payments unless they have paid such wages in full.

Rules Covering Harvesting and Milling of Excess Acreage Cane

The A.A.A. office at University, La., has issued complete instructions covering the harvesting and milling of excess acreage sugarcane. We print these instructions below.

University, La., October 21, 1940.

Sugar Circular Letter No. 12.

Gentlemen: You are informed that the president has now approved the Ellender Resolution which permits sugarcane growers in the mainland sugarcane area to harvest for sugar acreage in excess of their 1940 proportionate shares without disqualifying them for payment on their proportionate share acreage.

This resolution provides that payment shall be made only with respect to the 1940 proportionate share acreage established for the farm under the provisions of the Sugar Act of 1937, but a grower is permitted to harvest for sugar without penalty 110 per cent of his proportionate share or his proportionate share plus 25 acres, whichever is the greater. For such acreage harvested for sugar in excess of the allowable, as shown above, a deduction of $10 per acre will be made from the conditional payment for each acre harvested up to 500 acres. For so much acreage as exceeds 500 acres a deduction of $20 per acre will be made.

Since the Ellender Resolution permits the harvesting of excess acreage for sugar under certain conditions, there may be some producers in your parish who will wish to take advantage of the provisions of this resolution. However, if a grower harvests excess acreage for sugar, he must be prepared to furnish evidence of delivery of sugarcane to sugar mills acceptable to the county committee at the time of filing his application for payment. Growers must also be advised that where the yield of sugarcane from proportionate share acreage is materially higher than the yield from acreage in excess of the proportionate share and the difference in yield is not satisfactorily explained at the time the application is filed, it will be necessary to examine each case individually.

Since benefit payments are to be made only on proportionate acreage shares, the burden of proof of compliance will rest entirely with the grower, and in order to more easily show compliance the grower will be required to harvest the sugarcane grown on acreage in excess of the proportionate share in an operation entirely separate from the harvesting of sugarcane from proportionate acreage shares, and this harvesting operation of excess acreage for sugar must not take place until after all of his proportionate acreage share sugarcane has been harvested.

A grower, therefore, who intends to harvest sugarcane from excess acreage for sugar should protect himself by doing the following specific things:

1. Notify his respective county office of his intention to harvest sugarcane from excess acres, the approximate number of acres to be harvested, and the approximate yield therefrom, whether the cane is to be harvested for sugar, for sirup, or is to be abandoned.

2. Harvest his proportionate share acreage cane before commencing to harvest cane from excess acres.

3. Notify the factory when he begins the harvest of sugarcane from excess acreage for sugar.

4. Obtain receipts from the mill for all sugarcane harvested for sugar from excess acres.

5. Obtain receipts from the mill for all sugarcane harvested for sirup from excess acres.

6. Present to the county committee receipts showing deliveries of sugarcane from excess acres delivered to sirup mills and to sugar mills.

Processing

Since a processor or producer-processor may grind sugarcane from acreage in excess of proportionate shares, but since no benefit payment can be made on sugarcane harvested for sugar from excess acreage, and since sugar produced by a processor from sugarcane in excess of proportionate shares, or from non-proportionate share cane, can not be counted as "processings of sugar from proportionate shares" in any future marketing allotment, a full and detailed report of all such processings of sugarcane from excess acreage or from non-proportionate share acreage, must be made in writing to the county committee and the Administrative Officer in Charge of the A.A.A. at University, La. Such processor will, therefore, be required to:

1. Obtain a list from the county office of each parish from which he receives cane showing the name, serial number, and acreage in excess of proportionate shares of each producer delivering cane to his factory during the 1940 crop.

2. Ascertain from each producer whether he intends to deliver him sugarcane from excess acreage and the approximate tonnage therefrom.

3. Furnish to each producer on delivery a weight receipt showing the tons of sugarcane ground from said producer's excess acreage.

4. Keep a separate record of tons of cane ground and nor-

mal juice sucrose content of sugarcane from proportionate share acreage and from excess acreage, including his own. The first is to be reported on the marketing list and the latter for compliance purposes. Both will be used for making cane settlements in accordance with the fair price determination.

5. Keep a record of sugar manufactured from sugarcane grown in excess of proportionate shares from all producers of sugarcane in excess of proportionate shares including his own. This will be used for marketing allotment purposes.

6. Furnish the respective county offices and the State office with the names of producers who deliver cane from excess acreage to be manufactured into sugar.

Benefit payments will be made on the weight and commercially recoverable sugar content of actual cane harvested from proportionate share acres and not on an average weight and commercially recoverable sugar content of all sugarcane harvested, including cane from excess acreage, reduced to proportionate share acreage.

Since the harvesting of the 1940 Louisiana sugarcane crop is about to begin, producers should be advised immediately of the contents of this letter. They should be informed of the importance of keeping separate records of all sugarcane delivered from proportionate acreage shares, as well as from acreage in excess of the proportionate shares.

Producers should also be advised that in order to qualify for a conditional payment under the Sugar Act of 1937, all of the conditions for payment specified in Section 301 of the Sugar Act must be met with respect to excess acreage harvested for sugar, as well as with respect to proportionate acreage shares harvested for sugar. In other words, the child labor provisions of the Act must be adhered to, labor shall have been paid fair wages as determined by the Secretary, processors must pay the fair price for cane both on sugarcane harvested from excess acreage as well as on sugarcane from proportionate acreage shares, and there shall have been carried out on the farm such farming practices as the Secretary has determined. In this latter connection, you are reminded that Sugar Determination No. 86, issued April 30, 1940, requires an acreage of soil-building practices equal to not less than 30 per cent of the acreage of sugarcane for sugar growing on the farm for harvest in 1940. Therefore, growers who harvest acreage for sugar will be required to carry out soil-building practices equal to not less than 30 per cent of the acreage harvested for sugar, including acreage in excess of the proportionate share.

Yours very truly,

(Signed) JOHN J. DOLES,
Acting Administrative Officer in Charge.

Five Year Average Yield Per Acre

(A Paper Presented by Mr. Louis M. Billeaud to the Louisiana Sugarcane Technologists' Ass'n. June 18th, 1940)

This article deals with average yields of cane for a period of five years, namely 1935 to 1939 both inclusive.

In this farm I have 360 acres of land of which 297 acres are actually cultivated.

The different varieties of sugarcane which do well here are C. O. 290 which represents about 90% of the cane which is planted in this section of Lafayette Parish. Then comes C. P. 29-320 which does not yield as much tonnage as Co. 290 but because of its high sucrose content it is planted to a small extent. There is about 5% of it planted, but I fear that, although this spring was not a normal one our stubbles are very poor, and due to that fact combined with the AAA always cutting down our acreage there will be none or very little planted in the future, because the farmers have to get maximum tonnages from their acreage allotment so as to be able to stay in business. Were we not restricted in acreage I feel sure 29-320 would be planted to the extent of 15 to 20%. Then comes the 116 which yields a higher tonnage than 290 but the sucrose is slightly lower than in 290. It may be that this cane will do just as 290 that is the first 2 or 3 years the sucrose was not as good in 290 as it is now, so maybe the sucrose will get better and better in this variety 116. But even if the sucrose does come up to 290 I doubt that it will ever replace 290 because it does not withstand the cold as well. I do not know enough about 103 and 120 to discuss their relative values, however of the two 120 appears to be more promising.

Now to get down to actual yields. In 1935 we had a beautiful season in all respects, cultivating, growing and harvesting. I had 112.0 acres in cane of which I used 7 acres for seed, with the 105 acres left I had 12 acres of POJ 36 and 93 acres of 290 and I delivered 3834 tons to the mill for an average yield of 26.94 tons per acre, with an average sucrose of 12.43.

In 1936 the cultivating season was good but in June we had only .38 of an inch of rain. I had 136 acres in cane of which I used 8 acres for planting, and from the 128 acres left I delivered 2688 tons for an average of 21.00 tons per acre with an average sucrose of 12.40.

In 1937 I had 149 acres of cane, 9 acres was used for seed. In my stubble I was averaging 23 tons but on account of the freezes of Nov. 20, 21, 22 and also of Dec. 4, 5, 6 we had to cut the cane very low and my average went down. I delivered 2807 tons for an average of 20.00 tons per acre, with an average sucrose of 11.35.

In 1938 I had the best crop I had ever produced. In my stubbles I was averaging 26.50 per acre, but again on account of the freezes of Nov. 25, 26 we had to start cutting lower. But anyway I had 140.1 acres of which I harvested 131.0 acres and delivered to the mill 3325 tons for an average of 25.38 tons per acre with an average sucrose of 12.65.

In 1939 I had 140.8 acres in cane of which I harvested 131.0 acres and delivered to the mill 3545 tons or an average of 26.90 tons per acre, and an average sucrose of 12.02.

Taking an average of the five years 1935 to 1939 inclusive you will note an average of 24.04.

Sugar Cost Studies Being Continued By Louisiana State University

The 1940 Session of the Louisiana State Legislature provided funds to be used by Louisiana State University in studying the costs of producing sugar in Louisiana. The work of gathering data showing the costs of growing cane on large farms and of manufacturing raw sugar for the crop year 1939 has already been started. The field records are being taken by Mr. Reid M. Grigsby and Mr. Lloyd A. Theriot under the direction of Mr. Roy A. Ballinger of the Department of Agricultural Economics. It is expected that records covering the 1940 crop year will be taken

in the summer of 1941. The work of gathering data to show the cost of producing sugar cane on small farms is expected to start in January, 1941, under the direction of Mr. J. N. Efferson.

These studies are a continuation of the sugar cost studies started in 1938, with the aid of the American Sugar Cane League. The results of the studies already completed have been published in three bulletins of the Louisiana Agricultural Experiment Station numbered 314, 315, and 316. Anyone desiring copies of these bulletins may obtain them by writing to the University.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACTS OF CONGRESS OF AUGUST 24, 1912, AND MARCH 3, 1933

Of The Sugar Bulletin, published semi-monthly at New Orleans, Louisiana, for October 1, 1940. State of Louisiana, Parish of Orleans.

Before me, a Notary Public in and for the State and parish aforesaid, personally appeared Andrew W. Dykers, who, having been duly sworn according to law, deposes and says that he is the Editor and Business Manager of the Sugar Bulletin and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The American Sugar Cane League of the U. S. A., Inc., New Orleans, Louisiana; Editor, Andrew W. Dykers, New Orleans, Louisiana; Managing Editor, none; Business Manager, Andrew W. Dykers, New Orleans, Louisiana.

2. That the owner is The American Sugar Cane League of the U. S. A., Inc., New Orleans, La., (no stock) W. F. Giles, Adeline, La., President; W. C. Kemper, Franklin, La., Vice-President; Reginald Dykers, New Orleans, La., Secretary; Frank L. Barker, Lockport, La., Treasurer.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are none.

A. W. DYKERS,
Editor.

Sworn to and subscribed before me this 30th day of September, 1940.

ARTHUR A. DE LA HOUSSAYE,
Notary Public.

(Seal)

(My commission expires at my death.)

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against Foreign Competition

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Deficiency Payments

The following letter from Mr. W. M. Grayson, Senior Agricultural Economist, Agricultural Adjustment Administration, University, Louisiana, should be of interest to all members of the American Sugarcane League at this time.

University, Louisiana,
November 13, 1940.

Mr. Marcel Voorhies, General Manager,
American Sugar Cane League,
407 Carondelet Street,
New Orleans, Louisiana.

Dear Mr. Voorhies:

This is in reply to your inquiry concerning the eligibility of Louisiana sugarcane farms for 1940 crop deficiency and abandonment payments under the provisions of the Sugar Act because of the unusually small crop due to the 1940 spring freeze and other adverse factors during the past growing season.

Section 303 of the Act provides that in addition to the usual conditional payments the Secretary is also authorized to make payments, on the conditions provided in Section 301, with respect to bona fide abandonment of abandoned acres and crop deficiencies of harvested acreage resulting from drouth, flood, storm, freeze, disease, or insects, which cause such damage to all or a substantial part of the crop. Under this section and pursuant to the provisions of the Secretary's determination of normal yield of recoverable sugar per acre and eligibility for payment with respect to abandonment and crop deficiency, farms located in or adjacent to (if conditions affecting sugarcane culture are similar to conditions prevailing in such parish as certified by the State committee) a parish in which the actual yields of commercially recoverable sugar are 80 per cent or less than the normal yield therefor on 10 per cent or more of the sugarcane acreage of the parish, because of drouth, flood, storm, etc., shall be eligible for abandonment and deficiency payments.

The amount of the deficiency payment will be 60 cents per hundred pounds of commercially recoverable sugar on the difference between 80 per cent of the normal yield established for the farm and the actual yield of commercially recoverable sugar on the acreage harvested for sugar. In addition, if proportionate acreage shares have been abandoned the payment will be 60 cents per hundred pounds on one-third of the normal yield of such abandoned acres. The following two examples illustrate the application of the above provisions:

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The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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Example No. 1:

Planted proportionate acreage share	100 acres
Acres harvested for sugar	90 acres
Acreage harvested for seed	10 acres
Normal yield per acre	20.0 tons
Recoverable sugar per ton	1.75 cwt.
Normal yield of commercially recoverable sugar per acre, 20x1.75=	35.0 cwt.
Normal yield of acreage harvested for Sugar, 90x35.0=	3150.0 cwt.
80% of normal yield, harvested acres, 3150.0x80%=	2520.0 cwt.
Actual yield per acre, tons of cane	15.0 tons
Recoverable sugar per ton	1.6 cwt.
Actual yield of recoverable sugar per acre	24.0 cwt.
Actual yield of harvested acres, 90x24.00=	2160.0 cwt.
Deficiency, 2520.0 cwt.—2160.0 cwt.=	360.0 cwt.
Deficiency payment, 360.0x60c=	$216.00

Example No. 2:

Planted proportionate acreage share	100 acres
Acreage harvested for sugar	80 acres
Acreage harvested for seed	10 acres
Acreage abandoned	10 acres
Normal yield of commercially recoverable sugar per acre from Ex. 1	35.0 cwt.
Normal yield of harvested acres, 80x35.0=	2800.0 cwt.
80% of normal yield, harvested acres, 280x80%=	2240.0 cwt.
Actual yield of harvested acres from Example No. 1, 80x24.0=	1920.0 cwt.
Deficiency, 2240.0—1920.0=	320.0 cwt.
Deficiency payment, 320.0x60c=	$192.00
Proportionate share acres abandoned (bona fide)	10 acres
Normal yield per acre	35.0 cwt.
Normal yield of abandoned acres, 35.0x10=	350.0 cwt.
⅓ of normal yield of abandoned acres	116.67 cwt.
Abandonment payment, 116.67x60c=	$ 70.00
Total deficiency and abandonment payment, $70.00+$192.00=	$262.00

In example 1 the usual conditional payment would be the actual yield of commercially recoverable sugar harvested, or 90 acres x 24.0 cwt. x 60c=$1,296.00, making the total payment for the farm $1,296.00 plus $216.00=$1512.00.

The usual payment under example 2 would be 80 acres x 24.0 cwt. x 60c= $1,152.00, and the total payment would be $1,152.00 plus $192.00 for deficiency plus $70.00 for abandonment = $1,414.00.

It will be noted from the examples cited above that farms on which the actual yield of recoverable sugar from acres harvested for sugar is less than 80 per cent of the normal yield will receive benefit payments on 80 per cent of the normal yield, since deficiency payments make up the difference between actual yield and 80 per cent of the normal yield. In addition it is seen that producers who abandon acreage because of the unusual climatic conditions during the past season will receive additional payments equal to one-third of the payment that would have been paid on the normal yield of such acreage.

We trust that the above examples will answer the questions raised in your inquiry.

Yours Very truly,
W. M. Grayson,
Senior Agricultural Economist, AAA.

Government Crop Estimate

The Louisiana Cooperative Crop Reporting Service. Mr. H. H. Schutz, Senior Agriculturist Statistician, has the following to say regarding the 1940 Louisiana sugarcane crop:

"The preliminary indication is that 3,824,000 tons of cane will be harvested for sugar in Louisiana this year, compared with 5,084,000 tons in 1939 and an average of 3,627,000 tons during the 1929-38 period. Sugar production is expected to approximate 325,000 tons of 96° equivalent, which is about 110,000 below last year's production but 40,000 tons larger than the 10-year average.

"Weather conditions are favorable for harvesting, and the supply of field labor is said to be ample. Cutting of cane began late in October. Stands of plant cane are good in some sections, but the stalks are short. Yields on stubble cane fields have been disappointing.

"The United States production of sugarcane for sugar is estimated at 4,671,000 tons against 5,798,000 tons last year and the 1929-38 average of 4,096,000 tons. Production of 96° equivalent sugar in Louisiana and Florida is expected to be about 408,000 tons. This would be about 100,000 tons below last season's production but 82,000 tons above the 1929-38 average."

Louisiana Farm Bureau Adopts Resolution

The Sugar Advisory Committee of the Louisiana Farm Bureau Federation adopted the following resolution concerning sugar at its annual meeting held in Baton Rouge on October 30, 1940:

"WE RECOMMEND TO THE STATE EXECUTIVE COMMITTEE:

1. The production of non-surplus crops should be encouraged and assisted towards a reasonable gradual expansion at parity.

2. There should be no reduction in the rate of tariff on agricultural products which might have the effect of reducing the price of the domestic commodity below parity.

3. The farmer is entitled to receive a parity price at the time of the sale of his product, rather than by means of a government payment.

4. All reciprocal trade negotiations harmful to any phase of farming in Continental United States should be suspended during the emergency caused by the European War.

5. Complete exemptions as to both hours and wages should be specifically granted through amendments to the Fair Labor Standards Act in favor of all agricultural operations performed on the farm or incident to the first preparation of the farm product for market, including its conversion into a merchantable product.

6. Agricultural programs should be originated by farmers and farm organizations, rather than by those who administer the programs. Farmers and farm organizations must be accorded active supervision and participation in the administration of agricultural programs in the States, Counties, and local communities.

7. Due to gravity of the war situation, the National Defense Program, which might disrupt or cut off supplies of deficiency or import foodstuffs, we urge Congress to review in the next session present sugar policies of the Federal Government and adopt new programs based upon the National need in time of emergency."

Instructions For Filling Out Form SC-35

Mr. John J. Doles, Acting Administrative officer in charge of the A.A.A. in Louisiana has issued the following instructions covering form SC-35, the report on sugarcane acreage in Louisiana for 1940.

"Form SC-35 must be executed in all cases in which the 1940 planted acreage is in excess of the 1940 proportionate acreage share for the farm. Form SC-35 must be executed in quadruplicate. The original and one copy must be attached to the 1940 application for payment covering the farm when such application is made. One copy should be retained in the county office and one copy given to the operator of the farm.

Form SC-35 must *not* be executed until the harvest of the 1940 crop of sugarcane on the farm has been *completed*. The county committee should be assured that all deliveries of 1940 crop sugarcane to be made to sugar factories, sirup factories, or for any other purpose, have been made before Form SC-35 is executed.

Enter the state and county code and sugarcane farm serial number in the space provided in the upper right corner. This will be the code and serial number assigned to Form SC-35 for the farm.

1. Enter the number of acres shown in line 21, Form LS-307, plus the number of acres on the farm which were abandoned prior to measurement, with respect to which conclusive evidence of abandonment has been filed with the county committee.

2. Disposition of excess acreage:

(a) Enter the number of excess acres included in (1) which were harvested for sugar, as ascertained from the operator. Enter in the parentheses the name of the sugar factory or factories to which the sugarcane was delivered.

(b) Enter the number of excess acres included in (1) which were harvested for sirup, as ascertained from the operator. Enter in the parentheses the name of the sirup factory or factories to which the sugarcane was delivered.

(c) Enter the number of excess acres included in (1) which were harvested for other purposes, as ascertained from the operator. Enter the purpose or purposes in the parentheses.

(d) Enter the number of excess acres included in (1) which have been abandoned, as ascertained from the operator.

The sum of (a), (b), (c), and (d) of Section 2 must equal or exceed the amount entered in Section 1.

3. This section must be executed by the operator of the farm.

(a) If an amount is entered in 2(a), enter in the space provided the number of short tons of sugarcane harvested and delivered to sugar factories. Acceptable evidence of delivery to sugar factories must be filed with the county committee at the time or before Form SC-35 is filed in the county office by the operator. Growers should be advised that when an application for payment shows that the yield of sugarcane from proportionate share acreage is materially higher than the yield from acreage in excess of the proportionate share, and the difference in yield is not satisfactorily explained at the time the application is filed, it will be necessary for the county committee to examine the case carefully.

(b) If an amount is entered in 2(b), enter in the space provided the number of short tons of sugarcane harvested and delivered to sirup factories. Acceptable evidence of delivery to sirup factories must be filed with the county committee at the time or before Form SC-35 is filed in the county office by the operator. Growers should be advised that when an application for payment shows that the yield of sugarcane from proportionate share acreage is materially higher than the yield from acreage in excess of the proportionate share, and the difference in yield is not satisfactorily explained at the time the application is filed, it will be necessary for the county committee to examine the case carefully.

(c) If an amount is entered in 2(c) and documentary evidence of the designated disposition is available, it should be filed with the county committee. If such evidence is not available, the county committee should make every reasonable effort to verify the statement of the operator.

(d) The county committee should make every reasonable effort to verify the statement of the operator that the total sugarcane harvested for sugar is not in excess of the acreage of sugarcane for sugar planted on the farm prior to January 1, 1940.

The signature of the operator and the date of signing should be entered in the spaces provided.

If the county committee finds that the data on the Form SC-35 has been correctly entered, it should au-

thorize one of its members to affix his signature on behalf of the committee in the space provided. The committeeman who signs Form SC-35 must not be a near relative of the operator of the farm, or have any sort of financial interest in the farm covered by the Form SC-35.

If the secretary of the county agricultural conservation association finds that the data entered on Form SC-35 is correct according to records of the association, he shall signify his approval by affixing his signature in the space provided."

Form SC-35

(This form must be executed if the 1940 planted acreage is in excess of the 1940 proportionate share for the farm)

1. Acreage in excess of 1940 proportionate share for the farm - - - .....acres
2. The acreage shown in line 1 has been disposed of as follows:
   (a) Harvested for sugar (name of factory.....) .....acres
   (b) Harvested for sirup (name of sirup factory.....) - - - .....acres
   (c) Harvested for other purposes (specify.....) .....acres
   (d) Abandoned - - - - .....acres
3. The operator of the farm makes the following representations:

(a) .....short tons of sugarcane were harvested from the acreage shown in section 2(a) hereof, which is all of the sugarcane harvested from such acreage and receipts for the delivery of such sugarcane to the specified sugar factory(ies) or other suitable evidence of delivery have been placed with the county committee.

(b) .....short tons of sugarcane were harvested from the acreage shown in section 2(b) hereof, which is all of the sugarcane harvested from such acreage and receipts for the delivery of such sugarcane to the specified sirup factory(ies) or other suitable evidence of delivery have been placed on file with the county committee.

(c) All of the sugarcane harvested from the acreage shown in section 2(c) hereof was harvested for the purpose or purposes specified and was not marketed for the extraction of sugar.

(d) The total acreage of sugarcane grown on the farm and marketed (or processed) for sugar in the crop year 1940, including the acreage shown in section 2(a) hereof, is not in excess of the acreage of sugarcane for sugar planted on the farm prior to January 1, 1940.

A Summary of the Sugarcane Insect Investigations

Conducted at the Houma Laboratory of the Federal Bureau of Entomology and Plant Quarantine During 1939.

By J. W. Ingram, U. S. Department of Agriculture, Bureau of Entomology and Plant Quarantine.

In 1939, as in the last several years, the Bureau of Entomology and Plant Quarantine of the United States Department of Agriculture has carried on at the Houma, La., laboratory investigations of various phases of control work for the sugarcane borer, the sugarcane beetle, and other sugarcane insects, and surveys for possible new pests.

The Sugarcane Borer

Damage caused by the borer.—Every year a rather thorough survey is made at harvesttime to determine the damage done that year by the sugarcane borer (*Diatraea saccharalis* F.)). The sugar-producing area of Louisiana is divided into 10 sections, and a representative plantation is selected in each section for detailed examination. In the surveys of recent years the percentages of joints bored were found to be as follows: In 1935, 8.1; in 1936, 8.7; in 1937, 16.05; in 1938, 15.85; and in 1939, 19.74 per cent. In 1939, 76 per cent of the stalks were bored.

In cooperation with other workers at the Houma laboratory, investigations are being conducted to determine the losses in sucrose resulting from different degrees of borer injury in various commercial varieties. Results to date indicate that for equal borer sucrose losses are heaviest in C. P. 28/19 and lowest in Co. 290.

Numbers of overwintering borer per acre.—During February and March 1939 over 20 times as many borer larvae were found overwintering in trash of the variety C. P. 28/11 on light soil as were found on heavy soil. The following average numbers of live borer stages per acre were found in trash in replicated variety test plots on light and on heavy soils: C. P. 29/116, light soil 97, heavy soil 17; C. P. 28/19, light soil 121, heavy soil 24; and Co. 290, light soil 48, heavy soil 0. An average of 17 live stages per acre were found overwintering in cane stubs of all varieties examined, with the largest number in C. P. 29/116. No live borer stages were found overwintering in cornstalks or in any of the wild grasses except Johnson grass. Three live borer stages were found in 3,925 culms of Johnson grass.

Control of the borer by burning.—Applications of sulphur at rates of from 200 to 400 pounds per acre and of Diesel oil at rates of from 30 to 60 gallons per acre to trash before burning it did not increase the effectiveness of burning as a borer control. Additional proof was obtained that burning is the most effective method of decreasing the number of borers overwintering in cane trash.

Control of the borer by parasites.—In borer control by use of parasites 40 mated females of Sao Paulo strain of the Amazon fly (*Metagonistylum minense* (Towns.)) were introduced into Louisiana from Puerto Rico on May 14. The larva of this fly feeds on the borer larva and has been of great value in decreasing sugarcane borer losses in the West Indies and British Guiana. The introduced flies were propagated by dissecting the female flies and placing the fly maggots on borer larvae. In this way 3,217 flies were reared, of which 1,904 were released in 16 locations in Louisiana and in 3 locations in Florida. In Louisiana this parasite was recovered at harvesttime in 11 of 15 release fields in which searches were made. The number of borer larvae found killed by this fly ranged from 3.3 per cent in one field to as high as 58.6 per cent in another. The main difficulty in parasite introduction into Louisiana is the inability of the parasites to overwinter there. It remains to be determined whether the Sao Paulo strain of the Amazon fly is able to survive Louisiana winters.

Varietal susceptibility to the borer.—In a study of differences in the susceptibility of varieties to injury

by the sugarcane borer, infestation counts are made yearly at harvesttime in replicated variety test plots planted by the Bureau of Plant Industry of the United States Department of Agriculture. In 1939 additional proof was obtained that variety Co. 290 was resistant to borer attack and that C. P. 29/116 was very susceptible. Other commercial varieties suffered about average injury. In examinations for borer-killed "dead hearts" in the spring in stubble-cane variety test fields, it was found that in most varieties early-season injury was in proportion to late-season injury. Of promising unreleased varieties the most heavily bored in plant cane were C. P. 33/324 and C. P. 33/224 and the least bored were C. P. 33/202 and C. P. 33/253. In stubble cane the most heavily bored variety was C. P. 29/99 and the least bored were C. P. 33/202 and C. P. 31/509.

Three years ago examinations were begun to determine the extent of borer injury in seedlings produced at Canal Point and grown at Houma. In 1939 a total of 442 plant-cane and 701 stubble-cane varieties from Houma nursery plots were examined. Data obtained in these examinations were of value to workers of the Division of Sugar Plant Investigations of the Bureau of Plant Industry in the selection of promising varieties for further testing. Seedling varieties found least injured were planted in replicated plots for further testing of borer susceptibility. In 1938 eight apparently borer-resistant varieties were replanted in replicated tests. In 1939 six of these eight varieties continued to show resistance. Five of these six apparently resistant varieties were progeny of a cross with a cane introduced by E. W. Brandes from New Guinea. This particular New Guinea cane (N. G. 251) appears to transmit borer resistance to its progeny.

In 1939 the progeny of five other crosses also showed resistance. First-generation seedlings of crosses between Noble canes and cold resistant Turkestan canes showed half as much injury as Co. 281, but this lower injury undoubtedly resulted, at least in part, from the smaller diameter of barrels in the Turkestan canes.

Value of roguing out dead hearts.—Since some planters rogue out borer-killed dead hearts and some do not, four large-acreage experiments were initiated in 1939 to determine the value of this practice. Dead hearts were cut out four times between May 10 and June 6 at a total cost of from $1.61 to $1.90 per acre. It is estimated that 90 per cent of the borers in the field were eliminated. In August the percentage of stalks infested in the rogued areas was 31.6 and in the non-rogued area 45.6. At harvest there were 5 per cent less bored stalks in the rogued area than in the check. These experiments will of course need to be conducted over a period of several years before definite conclusions can be drawn from them on the value of roguing.

Insecticidal control of the borer.—Control of the borer by use of insecticides has been investigated in cooperation with the Louisiana Agricultural Experiment Station. In replicated, small-plot experiments cryolite has given a 90 to 95 per cent control of the borer on small plants for 3 consecutive years. One large-acreage experiment was conducted in 1939 in which cryolite was applied with a 5-row dusting machine and another large-acreage experiment was conducted in which an airplane was used to apply the cryolite. The results of these experiments were very promising, and additional experiments are being conducted in 1940 in cooperation with C. O. Eddy and A. L. Dugas of the Louisiana Agricultural Experiment Station.

Transmission of Mosaic By Insects

In studies of insects as agencies in the transfer of mosaic disease to sugarcane, further indications were obtained in three experiments that mosaic spread was no greater in low-mosaic-infected cane adjoining corn than in similar cane adjoining low mosaic-infected cane. It is of course understood that additional experiments are necessary to determine definitely the effect on mosaic spread of planting corn near low mosaic-infected cane. In an effort to decrease the number of aphids that spread sugarcane mosaic, 74 ladybeetles (*Coelophora inaequalis* (F.)) were introduced from Puerto Rico in 1939. These ladybeetles feed on aphids. From these ladybeetles 1,215 larvae and 73 adults were bred and released in Louisiana. In addition, adults were released in Georgia and in Florida.

The Sugarcane Beetle

Injury from the sugarcane beetle (*Euetheola rugiceps* (Lec.)) in 1939 was below the average for areas usually heavily infested, but injury was heavier in some areas where there is usually little damage. In experiments conducted in the Franklin area applications of 2 or more tons of ground oystershell lime per acre prior to cane planting resulted in a material increase in the number of shoots per acre at the height of beetle injury in plant cane and in the stubble crop following. At the same time beetle-injured shoots have been somewhat less numerous in limed plots. The sugarcane in limed plots was noticeably darker green in the spring, and the injured shoots appeared to recover more rapidly from beetle injury. Studies of the effect of liming on beetle losses are being continued.

For several years stand counts have been made at the height of beetle injury in the variety test plots grown by the Bureau of Plant Industry, and it has been recommended that in areas subject to heavy beetle injury varieties be grown that give the largest number of shoots per acre at the height of beetle injury. The estimated average number of shoots per acre at the height of beetle injury in 1939 on Oaklawn, Albania, and Erath Plantations are given in Table 1.

TABLE 1.—Estimated average number of sugarcane shoots per acre in replicated variety tests plots. Counts made on Oaklawn, Albania, and Erath Plantations, La., May 2-4, 1939.

Variety	Light Soil		Heavy Soil on Oaklawn Plantation only	
	Plant Cane	Stubble Cane	Plant Cane	Stubble Cane
C. P. 28/11	27,308	34,245	34,606	50,215
Co. 290	24,491	36,657	40,414	45,617
C. P. 29/116	26,279	32,691	30,462	35,574
C. P. 28/19	13,890	23,384	11,193	27,679
C. P. 29/320	14,091	22,148	------	26,860
Co. 281	14,448	18,077	------	------

These results are in line with findings in previous years showing that the varieties Co. 290, C. P. 29/116, and C. P. 28/11 are to be preferred for planting in beetle-infested areas. Co. 290, however, has usually given the largest number of plants per acre. Beetle-injured plants were marked in replicated plots. Co. 290 and C. P. 29/116 plants recovered most often from beetle injury, followed in order by C. P. 29/320, C. P. 28/19, C. P. 28/11, and Co. 281.

Surveys for Possible New Pests

In addition to the work already mentioned, surveys were made in various sugarcane-growing areas of the Gulf States to determine the status of pests known to be present and to search for pests that might have been

recently introduced. An early discovery of introduced pests would aid materially in their eradication and in preventing their spread to uninfested areas.

Organization of the Laboratory Force

The personnel of the Houma entomological laboratory and projects for which they are mainly responsible are as follows: E. K. Bynum, over-wintering of borers and treatments to decrease their numbers, roguing out dead hearts as a borer control, and study of sucrose losses from borer injury; T. E. Holloway, borer control with parasites; Ralph Mathes, varietal control of the borer; and W. E. Haley, L. J. Charpentier, and the writer, survey of borer damage, insecticidal control of the borer in cooperation with the Louisiana Agricultural Experiment Station, control of the sugarcane beetle and other miscellaneous insects, and insect vectors of sugarcane diseases. The Houma Laboratory is under the supervision of C. M. Packard (Washington, D. C.), in charge of the Division of Cereal and Forage Insect Investigations, Bureau of Entomology and Plant Quarantine, United States Department of Agriculture.

Sugar Statistics For First 9 Months of 1940 Announced By Sugar Division

(Official Release)

The Sugar Division of the Agricultural Adjustment Administration issued its monthly statistical statement on November 5th covering the first nine months of 1940, consolidating reports obtained from cane sugar refiners, beet sugar processors, importers, and others.

The statement shows, for the first time, the quantity of quota raw sugar held by importers other than refiners. and the quantity of sugar in customs' custody which is included in stocks of refiners and importers of direct consumption sugar. These data will be included in forthcoming monthly statements.

Total deliveries of sugar during the period of January-September, 1940, amounted to 5.125,438 short tons, raw value, compared with 5,547,249 tons during the corresponding period last year. Distribution of sugar in continental United States during the first nine months of 1940, in short tons, raw value, was as follows:

Raw Sugar by Refiners (Table 1)	6,357
Refined Sugar by Refiners (Table 2, less exports)	3,244,006
Beet Sugar Processors (Table 2)	1,225,054
Importers of Direct Consumption Sugar (Table 3)	591,988
Mainland Cane Mills for Direct Consumption (Table 4)	58,033
Total	5,125,438

The distribution of sugar for local consumption in the Territory of Hawaii for the first nine months of 1940 was 26,002 tons and in Puerto Rico 51,073 tons.

Stocks of sugar on hand September 30, 1940, and comparative figures for 1939, in short tons, raw value, were as follows:*

	1940	1939
Refiners' raw	458,769	285,636
Refiners' refined	351,341	215,011
Beet Sugar factories	393,766	306,322
Importers' direct-consumption sugar	106,028	119,858
Mainland Cane Factories	9,284	12,776
Total	1,319,188	939,603

*Not including raws for processing held by importers other than refiners, which amounted to 49,052 short tons, commercial value, in 1940 and 16,554 short tons, commercial value, in 1939.

These data were obtained in the administration of the Sugar Act of 1937. The statement of charges against the 1940 sugar quotas during January-September was made public on October 7.

Sugar Statistical Reports

Vol. 7 No. 9—January-September, 1940

Table 1
Raw sugar: Refiners' stocks, receipts, meltings, and deliveries for direct consumption for January-September, 1940
(In short tons, raw value)

Source of Supply	Stocks on January 1, 1940	Receipts	Meltings	Deliveries for direct consumption	Lost by fire, etc.	Stocks on September 30, 1940
Cuba	250,845	1,332,472	1,378,773	2,468	190	201,886*
Hawaii	46,212	764,314	741,669	1,283	0	67,574
Puerto Rico	37,187	448,386	393,298	242	0	92,033*
Philippines	17,902	677,266	607,724	108	2	87,334
Continental Raws	117,162	131,050	241,193	2,256	3	4,760
Virgin Islands	0	0	0	0	0	0
Other countries	9,397	33,959	38,174	0	0	5,182*
Miscellaneous	0	126	126	0	0	0
Total	478,705	3,387,573	3,400,957	6,357	195	458,769

*Includes sugar in customs' custody as follows: 45,453 tons from Cuba, 35,647 tons from Puerto Rico and 5,182 tons from "other countries."

Compiled in the Sugar Division, from reports submitted by sugar refineries on Form SS-15 A.

Table 2
Stocks, Production, and Deliveries of Cane and Beet Sugar by United States Refiners and Processors—January-September, 1940
(In short tons, raw value)

	Refineries[1]	Domestic Beet factories
Initial stocks of refined, January 1, 1940	355,600	1,351,886
Production	3,405,531	266,934
Deliveries	3,409,790[2]	1,225,054[3]
Final stocks of refined, Sept. 30, 1940	351,341	393,766

[1]The refineries' figures are converted to raw value by using the factor 1.061725, which is the ratio of meltings of raw sugar to refined sugar produced during the years 1938 and 1939.

[2]Deliveries include sugar delivered against sales for export. The Department of Commerce reports that exports of refined sugar amounted to 165,784 short tons, raw value, during the period January-September, 1940.

[3]Larger than actual deliveries by a small amount representing losses in transit, through reprocessing, etc.

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Compiled by the Sugar Division, from reports submitted on Forms SS-16 A and SS-11 C by the sugar refineries and beet sugar factories.

Table 3
Stocks, receipts, and deliveries of direct-consumption sugar, from specified areas, January-September, 1940
(In short tons, raw value)

Source of Supply	Stocks on January 1, 1940	Receipts	Deliveries or usage	Stocks on Sept. 30, 1940
Cuba	89,805	351,384	370,654	70,535*
Hawaii	138	6,027	6,145	20
Puerto Rico	11,313	173,196	168,981	15,528
Philippines	11,517	54,170	45,742	19,945
England	0	0	0	0
China and Hongkong	0	122	122	0
Other foreign areas	0	344	344	0
Total	112,773	585,243	591,988	106,028

*Includes 3886 tons in customs' custody.

Compiled in the Sugar Division from reports and information submitted by importers and distributors of direct-consumption sugar on Forms SS-15 B and SS-3.

Table 4
Mainland Cane Mills' Stocks, Production, and Deliveries, Jan.-Sept. 1940
(In short tons, raw value)

Stocks on January 1, 1940	Production	Deliveries		Stocks on September 30, 1940
		For Direct Consumption	For further Processing	
160,816	39,846	58,033	133,345	9,284

Table 5
Distribution of Sugar for Local Consumption in the Territory of Hawaii and Puerto Rico, January-September, 1940
(In short tons, raw value)

Territory of Hawaii	26,002
Puerto Rico	51,073

1940 Mainland Sugarcane Production Reported Within 505,000-Ton Limit

(Official Release)

The Sugar Division of the Agricultural Adjustment Administration announced on November 1st that sugar production from the 1940 crop in the mainland area will not exceed 505,000 short tons, raw value. This determination has been made in accordance with an amendment to the Sugar Act of 1937, approved October 10, 1940, which provides that Louisiana and Florida growers with acreage in excess of their 1940 allotments can qualify for Federal sugar payments on the 1940 crop if it is first determined that production in that area will not exceed 505,000 short tons.

The amendment provides that a grower may harvest without any deduction from his payment up to 110 per cent of his acreage allotments or his allotment plus 25 acres, whichever is larger, providing the acreage was planted prior to January 1, 1940. However, no payments will be made on excess acreage within the tolerance limits, and deductions from payments otherwise earned will be made if a grower's tolerance is exceeded. The deduction rate will be $10 for each acre, up to 500 acres, in excess of a grower's tolerance and $20 for each acre above 500.

The figure of 505,000 tons represents the quantity of sugar estimated early this year by the Department as necessary to enable the area to meet its 1940 quota and provide normal reserves.

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against Foreign Competition

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Washington Reflections

(*By C. J. Bourg*)

The value of the American Sugar Cane League to the Louisiana sugar industry is always best demonstrated in times of adversity and disappointment. It is only natural that growers of sugarcane should be looking for some silver lining in the clouds which have created the darkest year of the past decade. There are two principal sources of encouragement which the American Sugar Cane League can point to with a degree of satisfaction. The one of most immediate effect is Section 303 of the Sugar Act, which provides, in addition to the benefit payment of 60c per 100 pounds of sugar (or approximately 96c per ton of standard sugarcane), payments to be made for planted acreage which has been abandoned or for harvested acreage which is deficient in production below 80% of the normal yield of sugar per acre on each farm. The second is the research work being done and the new varieties of sugarcane being developed as a result of the cooperation of the League with the U. S. Bureau of Plant Industry and the Louisiana State Experiment Station.

By referring to the November 1st issue of the *Sugar Bulletin,* the readers will find the latest determination on the procedure to be followed in connection with deficiency and abandonment payments. Reference to the November 15th issue of the *Sugar Bulletin* reveals the complete letter of explanation furnished by Dr. Grayson, Senior Agricultural Economist of the A.A.A. It will not be possible to tell any grower exactly what his deficiency or abandonment payment will be until that grower has completed the harvest of his 1940 crop and until the records of the factory to which he delivered his cane have been made available. Therefore, questions as to what abandonment or deficiency payments may mean to any individual grower should be postponed until the necessary data has been compiled for each farm and the information furnished to the Parish Committees. The reason is that the amount to be paid will depend upon the actual extraction of sugar per ton of cane and the actual yield of sugarcane per acre on each farm, all in comparison with the normal yield per acre and per ton as established by the records of 1937, 1938, and 1939. It is especially fortunate that the Determination of October 24, 1940, changed the basis of determining the normal yield from the records of 1935 and 1936 to the records 1937, 1938, and 1939. This change alone will mean hundreds of thousands of dollars in additional payments to be distributed among practically all of the growers of sugarcane in Louisiana.

Such changes do not just happen, they are brought about by intelligent and constructive cooperation between the League and the State A.A.A. office at Baton Rouge and the Sugar Division in Washington. This cooperation has been greatly helped by the County Agents and the Agricultural Assistants working with the Parish Committees. By discussions among all of these groups, the real problems of the industry are better understood and receive consideration which produces results. It is easy to understand why some people say that "everybody's business is nobody's business"; because that is the real function of the American Sugar Cane League, namely, to make the business of everybody who produces sugarcane and sugar in Louisiana the most important business of the American Sugar Cane League. Up to 1940, the importance of having such a provision for abandonment or deficiency payments, as is contained in Section 303, received only passing notice and has been practically overlooked by most of the industry; but, it is when these payments can mean the difference between profit and loss, as is likely to happen

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for a great many growers in 1940, that the importance is fully appreciated of having an organization to see to it that such provisions are included in the law and also to cooperate with the agencies of Government to secure changes and improvements in the Determinations and Regulations, whereby the growers receive the full benefit of what congress intended by including abandonment and deficiency payments in addition to the benefit payments in the law.

Again, it is only when the need for new freeze-resistant varieties of cane is demonstrated by actual losses, that a full appreciation can be had of the work being done by the U. S. Office of Sugar Plant Investigations and the State Experiment Station. The American Sugar Cane League has cooperated with the U. S. Department of Agriculture in sending scientists to secure these freeze-resistant canes on the other side of the world, and to use them to breed new varieties of sugarcane at Arlington, at Canal Point, and in the various test plots of Louisiana. More recently, the American Sugar Cane League has made important contributions toward the operation of a refrigeration plant in which new varieties of sugarcane have been subjected to various degrees of temperature and other influences which in the past have affected the yield and extraction of existing varieties. These experiments, in addition to those being carried on at Houma on land and in buildings financed by the League and at Baton Rouge where the League has helped to finance the construction and operation of an experimental sugar plant, are already producing results which give encouraging promise that we may eventually develop early-maturing and freeze-resistant varieties which may reduce appreciably the freeze and other weather hazards.

* * * *

Although the Philippine Islands do not become completely independent of the United States in a governmental sense until the year 1946, they are now undergoing a period of transition in commercial relations. This period will extend for twelve years, from 1934 to 1946. At different times, Congress has been asked to make provision for commercial relations following the establishment of a completely independent commonwealth of the Philippine Islands. This Congress has refused to do; but instead there is provided in the Philippine Independence Act an authorization for a joint conference between representatives of the Commonwealth of the Philippine Islands and of the Government of the United States to be held in 1944 for the purpose of preparing and proposing a plan covering the future commercial relations. As we have previously reported, the Filipinos are already preparing themselves for this conference, and they have likewise begun to prepare the people of the United States. It is evident that they will seek a preferential status, whereby they would have the benefits of a protectorate in matters of commerce and national defense, even though their government would be completely independent of the United States in all other matters of policy. United States High Commissioner Francis B. Sayre recently contributed to the Atlantic Monthly a statement on the subject of Philippine relations in which he mentioned significantly that important Filipinos have in mind a preferential status such as Cuba enjoys. Sugar News is a magazine published in the Philippine Islands which calls itself the "Voice of the Philippine Sugar Industry." In the October number, the leading editorial is in connection with the Roxas Plan, which proposes extending the 12-year economic adjustment period to 22 years, ending in 1956. To keep ourselves abreast of developments as they begin to happen in anticipation of 1944 and 1946, we reprint herewith the editorial in full:

"THE ROXAS PLAN

"The Roxas plan of Philippine relief which proposes to prolong the economic adjustment period for at least ten years more and to postpone the gradual imposition of quotas and tariff duties on Philippine exports to the United States until four years after peace among warring nations has been reestablished is, indeed, an ideal arrangement to protect the interests of the Philippines, if the United States can be persuaded to accept it.

"The plan has full justification. The congressional formula as well as the plans that have been adopted for economic preparation were predicated upon normal conditions prevailing in the world, with commerce flowing freely among nations on the basis of free competition. That basic condition no longer exists. Circumstances which were not anticipated by Congress and are beyond Philippine control have made our task of economic readjustment here not only extreme-

ly difficult but practically impossible during the period granted to us.

"As already stated, the Roxas scheme is an excellent plan for the Philippines. Without, however, trying to dampen enthusiasm, it is not certain whether the United States would readily accept it. We wish merely to say that for any plan to succeed those who make it should include in their calculations the effect of such a plan upon the other side in order that obstacles to its realization may be forestalled.

"In launching the plan, Secretary Roxas states that any change in the program of economic adjustment need not postpone the date of independence prescribed in the Independence Act. This is tantamount to asking the United States to give the Philippines economic and military protection without permitting it to continue to exercise corresponding authority here. Then, the prolongation of economic adjustment and postponement of the effectivity of the imposition of quotas mean a corresponding prolongation and postponement of the competition which Philippine export products give to American products. We venture to say that the success of the Roxas plan will entirely depend upon the willingness of the American people to accept responsibility without corresponding authority, as well as to allow to continue further Philippine incursions into American industry and commerce.

"This is our reaction to the Roxas plan. We invite attention to it in all frankness, because it is best that we know beforehand what difficulty we might have to hurdle when the plan comes face to face for consideration by the American people."

U. S. D. A. Scientists Make Sugar From Sorgo Plant

(*Official Release*)

By discovering means of removing starch and alcoholic acid from the juice of the sorgo plant, used extensively in this country for making the ordinary sorghum sirup, scientists of the United States Department of Agriculture have developed a method for obtaining a satisfactory yield of sugar crystals which may be made into refined or granulated sugar by the customary procedure. One step of the new process closely parallels a chemical change that occurs in the human digestive process.

In making the announcement the Department pointed out that sorgo sugar has been produced only on a semi-industrial scale and that studies now must be conducted by the Bureau of Plant Industry, which is handling the agronomic phases of this project, to find what varieties of sorgo are best suited for sugar production and where it can be most profitably grown.

Research on the present project was begun only two years ago at Meridian, Miss., by Emil K. Ventre and S. Byall under the direction of H. S. Paine of the Bureau of Agricultural Chemistry and Engineering. Many previous attempts had been made by Department chemists to recover sugar from sorgo juice by a commercially feasible method but all failed. The first chemist hired by the Department in 1862 worked on this problem. The last previous attempt was made under the direction of the late Dr. Harvey Wiley, head of the old Bureau of Chemistry, but the project was abandoned as impossible in 1891.

The project was reopened when the investigators found that certain sorgo varieties used for sirup production gave juices of high purity and high sugar content comparable to some standard sugarcane varieties. Studies directed toward starch removal resulted in simple methods that worked successfully on pilot plant scale. The cane is double-milled and the raw juice is then centrifuged, in the same manner that cream is separated from milk, removing from 3 to 10 pounds of starch per ton of cane. The centrifuged juice is then treated with lime, heated, and allowed to settle in a conical tank. The clear juice at the bottom is drawn off and the scum on the top is forced through a filter press to recover the juice it contains.

This leaves a small amount of starch in the juice which must be removed, otherwise the sirup would jell instead of crystallize. Here, the investigators took a tip from the human digestive system. Certain enzymes in the digestive tract change starches to sugar. By treating the juice at this stage with an enzyme, pancreatic amylase, in a very small amount, the remaining starch is converted to products which do not seriously interefere with crystallization of sugar. Satisfactory percentage recovery of sugar per ton of sorghum cane was obtained.

After removal of starch and aconitic acid from the juice, it can be put through exactly the same process that is customarily used for production of cane sugar. Starch and aconitic acid both have important commercial uses and are expected to be valuable byproducts which will assist in reducing the net cost of the sugar. Aconitic acid, produced synthetically, is now being used in the manufacture of plastics where it plays an important role. Production as a byproduct from sorgo sugar would be the first supply from a natural source.

"Work done thus far," Dr. Henry G. Knight, Chief, Bureau of Agricultural Chemistry and Engineering said, "merely supplies evidence that sugar can be made from sorgo juice. Much work in the strictly scientific field is required."

Sugar Supply

The following statement has been released by the Bureau of the Census, U. S. Department of Commerce, showing the production from the three principal sources of sugar consumed in the United States:

"Census Bureau reports on sugar processing show that cane, beet, and corn sugar processed for table and confectioners' use during 1939 totaled 6,500,000 tons, an increase of 63,000 tons over 1937 production.

"Cane sugar refined totaled 4,126,000 tons, a decrease of 389,000 tons from 1937. Beet sugar increased 338,000 tons to 1,634,000 tons, and sugar produced from corn aggregated 233,576 tons.

"The Census report included only sugar obtained from sugar cane, sugar beets and corn, and did not include sugar extracted from maple, Indian maize, sorghum grass, fruit, milk and malt used in the manufacture of drug products, syrups, molasses, flavors, and candies. Neither do these figures include saccharine."

Notes On Wind Damage To Sugarcane

By L. P. Hebert, Junior Agronomist, and George Arceneaux, Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture.

It is well recognized that different varieties of sugarcane may differ widely as to the stress required to cause breakage or other injury to the stalk and that, as a result, certain varieties may show much more extensive damage than others under severe wind conditions. While susceptibility to wind damage, even to an extreme degree, cannot in itself be considered a disqualifying character, it is felt that such a disadvantage should be duly recognized in any attempt to measure the comparative merits of a sugarcane variety.

Fortunately for the Sugar Industry, Louisiana has not been visited by a hurricane of extremely severe intensity since the introduction of varieties now in extensive commercial culture. A tropical disturbance accompanied by winds ranging in velocity from 25 to 50 miles per hour swept across several of the coastal parishes on July 27, 1936. The lower sections of the Sugarcane District was again visited by a storm of moderate intensity during the period August 5 to 7, 1940.

In a study following the 1936 storm Stokes[3] found the most severe damage in the variety C. P. 28/11 with C. P. 29/320 and Co. 281 next in order of the extent of breakage suffered. C. P. 28/19, however, proved highly resistant to damage.

This report summarizes the results of field observations following the 1940 storm to determine the extent of damage suffered by sugarcane of different varieties. Nine of the eleven U.S.D.A. variety test fields were in the path of the storm, hence there was an opportunity to study wind damage under a relatively wide range of conditions. Wind velocities, which reached a maximum of 33 miles per hour at the U. S. Sugar Plant Field Station near Houma, were estimated to have ranged from 25 to 55 miles per hour during the progress of the storm across the coastal parishes affected. Maximum velocities at the remaining test fields were not determined.

Comparative breakage data presented in Tables 1 and 2 summarizing the results of studies on plots of the principal varieties now being tested are in agreement with results reported by Stokes. C. P. 28/11 suffered, by far, the most severe damage. This variety was not included in plant cane tests but in first stubble tests (Table 2) showed a consistently high number of broken stalks per acre with an average of more than 12,000 per acre in tests on light soil and nearly 28,000 per acre in tests on muck soil. C. P. 29/320 was next in order of damage suffered with approximately one-third the breakage shown by C. P. 28/11 in the average of first stubble tests on light soil and one-half on muck soil.

In the average of plant cane and first stubble Co. 281 and Co. 290, in the order named, ranked next to C. P. 29/320 as to breakage.

Table 1. Summary of wind breakage observed in plant cane of important sugarcane varieties.

Variety	Number of broken stalks per acre									Percent of estimated number of maturable stalks broken	
	Tests on light soils								Tests on muck soil	Tests on light soils	Tests on muck soil
	Houma	Greenwood	Raceland	Oaklawn	Albania	L. I. Landry	Erath	S. L. I	Average	Clovelly	
Co. 281	1755	3630	6262	1270	1996	2178	3267	363	2590	5626	5.76	12.50
Co. 290	232	3630	2901	2178	1452	1815	3539	635	2048	----	4.27	----
C. P. 28/19	174	363	181	0	726	454	1452	454	475	1270	0.99	2.65
C. P. 29/103	0	272	0	91	181	0	454	91	136	----	0.31	----
C. P. 29/120	49	0	272	0	0	91	91	0	63	----	0.14	----
C. P. 29/320	4902	2269	8167	2450	635	726	5989	635	3222	8349	7.32	18.97

Table 2. Summary of wind breakage observed in first stubble of important sugarcane varieties

Variety	Number of broken stalks per acre									Percent of estimated number of maturable stalks broken	
	Tests on light soils								Tests on muck soil	Tests on light soils	Tests on muck soil
	Houma	Greenwood	Raceland	Oaklawn	Albania	L. I. Landry	Erath	Average	Clovelly		
Co. 281	637	4628	3267	7351	4174	2269	1361	3384	2450	7.52	5.44
Co. 290	781	4447	3358	2632	4174	2178	2541	2873	----	5.99	----
C. P. 28/11	7105	18,513	15,790	15,337	14,066	8167	9892	12,696	27,951	25.39	55.90
C. P. 28/19	343	1180	0	726	511	0	907	360	1724	0.75	3.59
C. P. 29/103	588	1089	726	2541	635	544	1089	1030	----	2.34	----
C. P. 29/320	3332	3902	3630	7895	6080	91	3620	4079	12,070	9.27	27.43

In agreement with observations following the storm in 1936, C. P. 28/19 again proved highly resistant to wind damage. It is noteworthy that the two new varieties C. P. 29/103 and C. P. 29/120, which were released for commercial culture in the fall of 1939, showed even less extensive breakage than that suffered by C. P. 28/19.

Tables 1 and 2 also give the estimated per cent breakage of stalks which would ordinarily have reached maturity. In arriving at the latter a representative number of stalks, which as based on previous studies may be expected to reach maturity, was assumed for each variety. The number of stalks which will actually reach maturity in each case could not, of course, be determined at the prevailing stage of growth but it is believed that assumed values afforded a fairly satisfactory basis for comparison. Broken stalks in all cases were relatively tall and would ordinarily have reached maturity had not the breakage occurred.

The relative varietal susceptibility to wind breakage as based on percentage values was not greatly different from that based on the actual number of broken stalks per acre. The extreme weakness of C. P. 28/11 in this regard is emphasized by the observed breakage of more than 25 per cent of the estimated number of maturable stalks in the average of all tests

[3]Stokes, I. E. Wind damage to new varieties of sugarcane. Sugar Bull. 14 (21), pp. 8-12, September 15, 1936.

on light soil (Table 2) and a breakage of more than 55 per cent of the estimated number of maturable stalks in the one test on muck soil.

Table 3. Summary of wind breakage observed in preliminary tests of C. P. Seedlings in comparison with Co. 281.

Variety	Average number of broken stalks per acre (1)		Percent of estimated number of maturable stalks broken	
	Plant cane	First stubble	plant cane	First stubble
Co. 281	2510	2390	5.58	5.31
C. P. 29/137	544	453	1.24	1.03
C. P. 31/529	9403	----	21.37	----
C. P. 31/509	5021	5142	11.41	11.66
C. P. 32/202	----	1428	----	3.37
C. P. 32/206	332	332	0.82	0.75
C. P. 32/324	212	60	0.50	0.14
C. P. 33/233	363	----	0.82	----
C. P. 33/243	1512	1089	3.44	2.47
C. P. 33/253	756	605	1.72	1.37
C. P. 33/372	181	----	0.41	----
C. P. 33/409	2299	----	5.22	----
C. P. 34/1	5735	----	13.03	----
C. P. 34/21	622	----	1.41	----
C. P. 34/77	1743	----	3.96	----
C. P. 34/79	453	----	1.03	----
C. P. 34/80	1452	----	3.30	----
C. P. 34/120	2558	----	5.81	----

(1) Average of counts at Greenwood, Raceland, Oaklawn, Albania, L. J. Landry, Erath, and S. L. I.

Table 3 gives wind breakage comparisons between Co. 281 and a number of advanced C. P. selections as based on studies conducted at the following seven plantation test fields where these varieties are now growing in limited preliminary tests: Greenwood, Raceland, Oaklawn, Albania, L. J. Landry, Erath, and S. L. I. The extensive breakage observed in the otherwise promising seedling C. P. 31/529 would seem to place the variety approximately in a class with C. P. 28/11 but direct comparisons are not available. C. P. 31/509 and 34/1 suffered somewhat more severe breakage than might be expected with C. P. 29/320 while C. P. 33/409 and 34/120 showed approximately the same breakage as suffered by Co. 281. Other seedlings included in this group ranged from moderately to highly resistant to wind injury.

Harvesting of Excess Acreage

The letter printed below is the official communication of Mr. G. T. Durbin, Administrative Officer In Charge of the AAA in Louisiana, to the Louisiana sugar industry relative to excess acreage cane. The ruling contained in this letter closed the door on all efforts of the Louisiana cane farmers to harvest at least a part of the over-quota cane damaged by the recent freeze before completing proportionate share operations.

University, Louisiana,
November 18, 1940

Gentlemen:

The following exchange of telegrams between this office and the Sugar Division in Washington gives the Department's views with respect to the harvesting of acreage in excess of proportionate shares by producers who have such acreage:

University, La.,
November 15, 1940.

"G. Laguardia, Head,
Sugarcane Unit, Sugar Division,
Department of Agriculture,
Washington, D. C.

"Due to sub-freezing temperatures in the sugarcane belt last night producers, fearing a big loss of sugarcane from excess acreage which because of its generally poor stand and quality cannot be successfully windrowed, are urgently requesting that the previous ruling be rescinded and that they be allowed to harvest this cane now before finishing up with the proportionate share cane now being windrowed in order to save it. Please give this request your immediate consideration.

G. J. Durbin,
Administrative Officer in Charge."

Washington, D. C.
November 16, 1940.

"G. J. Durbin,
Administrative Officer in Charge, AAA,
Baton Rouge, Louisiana

"Reference your wire November 15. Under the provisions of Section 301(c) as amended by Public Resolution No. 104 it is not possible to consider sugarcane as marketed from excess acreage until the sugarcane from all proportionate share acreage in the farm has been marketed or processed.

G. Laguardia."

Please be guided accordingly in establishing compliance with respect to Section 301(c) of the Sugar Act of 1937 for producers who have sugar cane in excess of their proportionate share in your parish.

Yours very truly,
C. J. DURBIN,
Administrative Officer in Charge.

A Bacteriological Study of the Manufacture of Raw Cane Sugar

By C. H. Millstein, L. Tobin, and C. S. McCleskey,
Louisiana State University.

(A paper read at the annual meeting of the Louisiana Sugar Cane Technologists Association, Thibodaux, La., October 16, 1940).

The numerous studies which have been made on the keeping qualities of sugar indicate that the principal factors which influence deterioration are mocrobical content and moisture. Keller (5) has recently reviewed much of the literature on this subject and there is no need for us to discuss the findings of Owen (7, 8, 9), Brown (1), Kopeloff et al (6), van der Linden (10), and many others who have studied this problem.

Since most of the organisms in sugar are derived from the sugar house processes of manufacture (2, 3, 4), it was desired to re-examine the sources of contamination in the factory. It is important to determine at which stages in the process the organisms enter, so that precautionary measures may be taken, if the losses from deterioration appear to warrant. So far as we are aware, no bacteriological studies of modern plants have been made using the newer growth promoting culture media.

Determinations of the numbers of organisms at 14 stages in the manufacture of raw cane sugar were made. These were the crusher, three mills, scale tank, Seip and Dorr clarifiers, filter press, evaporator, storage tank, crystallizer, massecuite, sugar, and molasses. All samples were collected in wide-mouth, round, glass-stoppered bottles of about 130 cc. capacity, which were covered with flannel and sterilized in the autoclave for one hour at 121° C. (15 pounds steam pressure).

The organisms which were determined in the samples may be divided into two groups, mesophiles and thermophiles. The mesophiles are considered as being those organisms which grow at median temperatures—from about 15° C. (59° F.) to about 40° C. 104° F.), while the thermophiles are those organisms which grow at higher temperatures, about 40° C. (104° F.) to about 60° C. (140° F.). Examination was also made for spores, which would resist heating to 80° C. (176° F.) for 10 minutes. In these experi-

ments mesophiles were determined at room temperature and at 37° C. (98° F.), and thermophiles were determined at 55° C. (131° F.).

Samples obtained from the crusher, three mills, scale tank, and liming tank were examined. Several media including some used in previous investigations were employed, of which raw juice tryptone agar gave the highest counts. Using this medium, the numbers of organisms in the juice increased from about 10,000,000 per cc. at the beginning of the season to about 600,000,000 per cc. toward the end of the season. The thermophiles varied from 14 to 169 per cc. of raw juice.

The effluent from the Seip and Dorr clarifiers contained from 0 to 11 mesophiles and from 0 to 8 thermophiles per cc. The filtrate from the pressed sludge of the clarifiers contained from 0 to 50,000 mesophiles and from 18 to 205,000 thermophiles per cc.

The numbers of mesophiles in the raw juice samples were reduced by the processes of the Seip and Dorr clarifiers to very low counts. Some of the samples drawn from the clarifiers were actually sterile. However, the number of organisms in the samples of filtrate from the press, which filtered the clarifier sludge, exceeded the number of organisms from the clarifiers. This press juice is probably an important source of the contamination of the final product, since there is no place in the factory beyond this point at which samples are practically sterile.

Most of the thermophiles in the raw juice were likewise removed by the Seip and Dorr clarifiers and some of these samples contained no thermophiles at all. Here again, however, the number of organisms per cc. of filtrate also showed marked increase over the number per cc. of clarifier effluent. This is probably due to the fact that although the mats in the press and the sludge itself act as filters and remove a great many organisms, they do not remove all of them. It appears probable that the juice from the press is the portal of reentry of the thermophiles and thermophilic spores.

The numbers of organisms which developed at lower temperatures varied from 200 to 3,300 per cc. in the evaporator and from 1,320 to 7,100 per cc. in the storage tank. In the crystallizer samples the mesophiles averaged 22,000 and thermophiles 5,400 per gram. The massecuite contained about 6,000 mesophiles per gram and approximately the same number of thermophiles.

Raw sugar tryptone agar was more satisfactory than any of the other media used for the enumeration of organisms in raw sugar. A study of the number of thermophiles and mesophiles in sugar and molasses of the same strike showed that there were fewer organisms in the sugar than in the molasses, and fewer thermophiles than mesophiles. This may be due to growth of the organisms in the pipe which leads to the centrifugal under conditions which favor the growth of mesophile organisms. Raw sugar contained 100 to 2,200 thermophiles and 340 to 5,100 mesophiles per gram. Molasses contained 1,150 to 16,500 thermophiles and 3,000 to 310,000 mesophiles per gram.

Table 1. Numbers of mesophile bacteria at various stages in the production of raw cane sugar.

Sample	Low	High
Raw juice	8,000,000	16,000,000(a)
Raw juice	570,000,000	750,000,000(b)
Seip effluent	0	11
Dorr effluent	0	9
Press juice	0	51,000
Evaporator	200	3,300
Storage tank	1,300	7,100
Crystallizer	2,000	44,000
Massacuite	1,200	10,600
Raw Sugar	340	5,100
Molasses	3,000	310,000

(a) Early in the season.
(b) Near the end of the season.

Table 2. Numbers of thermophilic bacteria at various stages in the manufacture of raw cane sugar.

Sample	Low	High
Raw juice	14	170
Seip effluent	0	4
Dorr Effluent	0	8
Press juice	3,700	205,000
Evaporator	200	15,500
Storage tank	16,100	38,500
Crystallizer	350	15,000
Massecuite	1,700	17,100
Raw Sugar	100	2,200
Molasses	1,200	16,500

REFERENCES

1. Browne, C. A. Jour. Ind. Eng. Chem. 10: 178-190. 1918.
2. Calton, F. R. Jour. Ind. Eng. Chem. 28: 1235-1238. 1936.
3. Cameron, E. J., and W. D. Bigelow, Jour. Ind. Eng. Chem. 23: 1330. 1931.
4. ....., and C. C. Williams. Cent. Bakt., Zabt. 76: 28-37. 1938.
5. Keller, Arthur G., The Sugar Bulletin 17 (24): 5-7. 1939.
6. Kopeloff, Nicholas, C. J. Welcome, and Lillian Kopeloff. La. Agric. Expt. Sta. Bull. No. 175. 1920.
7. Owen, W. L. La. Planter 49: 293-295. 1907.
8. ....., La. Planter 61: 91-94, 107-109. 1918.
9. ....., La. Planter 71: 88-90. 1922.
10. van der Linden, T. Arch. Zucherind, 24: 1793-1800. 1916.

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An Editorial

Your attention is directed to the scientific articles appearing elsewhere in this issue.

The Editor of *The Sugar Bulletin* has heard criticism, from time to time, that much of the material printed in this publication is over the heads of its readers. In short, that he has often pitched its standard on too high a plane.

To agree with this the Editor first has to overturn two convictions that he firmly believes to be true.

One conviction is that *The Sugar Bulletin* should be a publication designed to uplift the knowledge of our people.

The other is that the declaration made innumerable times by both private and public speakers that the Louisiana sugar planters comprise the most intelligent agricultural group of similar size in the United States is true.

Either conviction, alone, justifies the publication in the official organ of the American Sugar Cane League of not only material of the type that has been hitherto printed in it, but even better and higher grade material if it can be had.

Obviously the criticisms referred to have no reference to the editorials, for there have been none (except this one) for a year, by instructions. Nor can they attach to the official releases of various kinds that have been printed for the guidance of the members of the League in their progress along the difficult path the Sugar Act forces them to tread. Nor to the enlightening reports from Washington by Mr. Bourg.

This brings us to the reluctant conclusion that the scientific articles supplied at one time very frequently, but in our belief not often enough now, by the technical torch-bearers of our industry, are considered to be above the heads of our people.

If that be true, it is up to our people to stretch their necks and reach them. Any other course will be disgraceful.

Freeze, Frost and the Golden Rod

Twenty-one days after the Golden Rod blooms the first Frost can be expected in the Cane Belt.

One lunar month after the first frost, Ice (likely a Freeze) can be expected.

Damaging freezes almost always come with Full Moon.

This is the data used by Old Timers in the Lafourche-Terrebonne area for judging time for the windrowing of the cane crop.

Emile A. Maier.

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We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 19 NEW ORLEANS, LA., DECEMBER 15, 1940 No. 6

Domestic Sugar in National Affairs

(Address of C. F. Dahlberg, Vice-Chairman of the Educational Committee of the American Sugar Cane League, Before the National Association of Commissioners, Secretaries and Directors of Agriculture, New Orleans, Louisiana, December 10, 1940)

There is an old saying that actions speak louder than words, and for that reason I have just presented a moving picture of the Louisiana sugar industry. In addition to the action you have just seen, however, I will discuss the subject of sugar with you so as to give you a complete picture of the importance of the industry, not only to the people of Louisiana, but to the nation as a whole.

Sugar is one of the few agricultural commodities of which we, in this country, produce less than our requirements. Our total consumption is something like 6,600,000 tons annually, of which the United States continental production of beet and cane sugar is limited by the present law to less than 30%. The balance of our requirements is furnished by Hawaii, Puerto Rico, the Philippines, Cuba and a few countries in South America.

In 1933, when the first sugar law was passed, each area, including the United States sugar beet area and the United States sugar cane area, received a percentage quota restricting the amount of sugar that could be produced for this market. At that time Louisiana was just recovering from the ravages of the mosaic cane disease, which had cut its production almost to the vanishing point, and as the establishment of production quotas was based on immediately prior history Louisiana's share of the domestic market, as then established under the quota system, was entirely inadequate and entirely out of line with its past production, its ability to produce and its needs from an efficiency standpoint; and although Louisiana's quota was increased under the present law we are still not allowed to produce enough sugar on each plantation for a proper operation; and, as Louisiana has successfully produced sugar for over 140 years, and is therefore a pioneer in this particular field, we rather feel that we are unjustly discriminated against, in favor, principally, of the Philippines and Cuba.

At this point, by the way, I wish to remark that due to the mosaic disease our yields had decreased until in 1926 Louisiana produced only 755 pounds of sugar to the acre, but in 1939 our recovery had been such that our production was 3,664 pounds to the acre, which compares favorably with many other countries where cane sugar is a major crop. This year our production will be less, but that is due to most unusual and unfavorable weather during the entire cultivating and harvesting season. That, however, can be considered a non-recurring calamity. Its like has never occurred before, and will probably never occur again in our lifetime.

The subject I am asked to discuss is "Domestic Sugar in National Affairs", and that, of course, embraces beet sugar as well as cane sugar.

Continental sugar is today produced in twenty-one states where beets are grown and in two states, namely Louisiana and Florida, where cane is grown. It has, therefore, a definite bearing on the welfare of the citizens of twenty-three states in the Union, so sugar can be truly said to be a national problem. Certainly it is national from the standpoint of the consumer, as every man, woman and child consumes sugar daily; and since, as I have pointed out, it is produced in twenty-three of the forty-eight states it must also be considered a national problem so far as production is concerned.

The statement has been made repeatedly that the

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Andrew W. Dykers, Editor
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domestic sugar industry is an inefficient industry because sugar can be purchased more cheaply in Cuba, for instance, and therefore we should produce less of our requirements at home. Let us look at the picture from that standpoint for a moment.

It is estimated that there are 1,300,000 acres of land in the United States devoted to the production of either sugar cane or sugar beets. If that land were taken out of sugar crops what should it be diverted to? What other crops should be produced thereon? Would you gentlemen from Wisconsin and Minnesota suggest that the sugar beet farmer and the sugar cane farmer divert his lands to the production of dairy products; would you gentlemen who are from states raising corn and hogs suggest that he go into corn and hog farming; or would the Southern commissioners suggest that the sugar acreage be diverted into cotton; and so on indefinitely? The productivity of this country now is such that more of almost everything is produced here than there is a ready market for, *except sugar.*

And into what employment should the thousands of workers now engaged in the production of sugar be inducted; or, in order that we may buy our sugar from abroad, should these thousands simply be added to an already overburdened roll of unemployed?

No, gentlemen, sugar is no more of an inefficient industry, just because it can be purchased cheaper abroad, than is the shoe industry, the meat industry, the flour industry, the textile industry, the glass industry, dairying or truck farming. Almost everything you may point to can be purchased more cheaply abroad than it can be produced in this country, due principally to the wages paid to the workers in those countries and to the living conditions they exist under, which no self-respecting American citizen would and should tolerate. America is the great country it is today because we pay living wages and so enable our citizens to live like human beings, but to do that the American producer must be allowed to produce in the American way, and at the American cost. And we must be producers, for unless we are producers we will soon cease to be consumers.

Another argument for buying our sugar abroad instead of producing it at home is the buying power of the foreign countries for our exports, especially Cuba, which it is said cannot buy much from us unless we buy substantially from them, and so let's look at that picture also for a moment.

The official reports of the United States Department of Commerce show that in 1937 the 160 sugar mills in Cuba purchased sugar mill machinery from the United States amounting to $521,000.00, and in 1938 amounting to $198,000.00.

For comparative purposes I have gathered similar statistics from the 74 sugar mills in Louisiana, and am amazed to find that although Louisiana produces only one-seventh as much sugar as does Cuba, its purchases of sugar mill machinery for 1937 amounted to $4,079,000.00, and for 1938 to $2,981,000.00, or a total of $7,060,000.00 for the two-year period. This is roughly *eight times* the value of sugar mill machinery purchased by Cuba from the United States during the same time. I wish to emphasize that these purchases of sugar mill machinery represent the purchases of the Louisiana sugar industry alone.

The statistics for the United States beet sugar industry show total purchases of $17,800,000.00 for 1937 and 1938. Added to Louisiana's purchases this makes total sugar mill machinery purchases by continental sugar producers in the years 1937 and 1938 amount to **$24,860,000.00**, as compared to only **$719,000.00** for Cuba. In this item therefore Cuba's purchases in this country amounted to only one-thirty-fifth as much as those of the industry in the continental United States.

Automobile sales have lately been taken as an index to prosperity, so let's take a look at that picture.

Sugar is produced in 330 of the 3,000 counties in the United States. In 1930, 20,072,653 persons lived in these 330 counties, or 16.3% of the national population. Using Government statistics, we find that the residents of the sugar counties owned 4,923,000 automobiles. In the same year all of Cuba had only 27,505 automobiles registered, or barely one-half of 1% of the number operated in sugar counties in the United States. This is an index to the difference in the mode of living obtaining in the sugar sections of this country as compared to that of Cuba. And during the years 1931 to 1936 the United States exported to Cuba only 9,978 automobiles valued at $6,405,000.00, but during the same six years the cars sold in sugar counties of the United States represent the astounding total of $1,725,786,000.00, or 270 times the sales to Cuba during the same period.

I dare say production of automobiles and machin-

ery draw something from every state in the Union (iron, coal, textiles, oil, etc.) so on that account the domestic sugar industry becomes of immediate interest to people in almost every corner of the country.

But, going beyond machinery and automobiles, and looking at the figure of total exports to and imports from Cuba, we find that for the five years 1935 to 1939 inclusive our total exports to Cuba amounted to a value of $373,166,297.00, while our imports from that country during the same period amounted to $594,513,393.00. In other words, we imported 60% more than we exported, so the importance of our export trade with Cuba fades, especially when taking into consideration the fact that the imports consist principally of such agricultural items as can and should be produced in this country.

I am sure you have all read press announcements of the large sums of money paid by the Government to producers of sugar cane and sugar beets—three-quarters of a million dollars to each of several plantations in Hawaii; one-half million dollars to each of several plantations in Porto Rico and Florida; hundreds of thousands of dollars to each of several plantations in Louisiana, etc.—all with big headlines and all calling attention to the fact that these huge payments come out of the United States treasury. News like that is always front page stuff, especially at a time like the present when high taxes and growing Government deficits are the order of the day. Yes, these payments are made, but what the newspaper articles do not mention is that the sugar industry itself makes these payments into the treasury in the first place by paying a processing tax of 53-1/2c on each bag of sugar refined, and it is from this sum that the payments to the growers are made. To obtain these payments, which the sugar industry itself subscribes to, the grower, however, is compelled to live up to all the rules and requirements prescribed for him, such a reducing his acreage, paying certain wages, working certain hours, carrying out certain farm practices, etc., etc., all of which hamper him tremendously and increase his cost immeasurably; and what the newspaper reports further withhold mentioning is the fact that despite this processing tax of 53-1/2c per cwt. the price of sugar to the consumer is lower today and for the past several years than at any time in our history; and what these articles still further omit to say is that the treasury of the United States collects many millions of dollars *more* from the sugar industry in processing taxes than it pays out under the program to the sugar beet and sugar cane growers.

I am particularly glad to have the opportunity of explaining this one point. The United States treasury certainly is not being pillaged by the domestic sugar industry.

So, gentlemen, the domestic sugar industry is not uneconomical and it is not a burden. It is a necessary and fundamental part of our national economy, and should be carefully fostered.

The present sugar law expires at the end of 1941, so early next year it is on the program to consider new sugar legislation. We are looking for a hard fight to obtain the kind of legislation we will need, and when I say "we" I mean the beet sugar producers as well as the cane sugar producers. Many arguments both for and against domestic sugar will then be heard. The Philippine Islands will have delegations in Washington arguing for better treatment, although they are now shipping into the United States almost two and one-half times as much cane sugar as we who are citizens of this country and who support it are allowed to produce. We will hear much about our moral obligation in that direction, and how necessary the welfare of the Philippines is to our national defense. But since the Philippines worked hard and long to become independent of the United States it is difficult to understand the attitude of our Government on this question of our moral obligation to the point where we should feel it necessary to give the Philippines more liberal treatment as to sugar than is accorded our own citizens.

We will also be told that in these times of Western Hemispheric solidarity Cuba must be better taken care of because we must be a good neighbor and because of the general safety of the Americas. No one is more anxious to be a good neighbor than am I, and no one is more anxious that no means of national defense should be overlooked; but at the same time I think we must all recognize the fact that to be strong does not only mean guns, airplanes, outpost defenses and friendly neighbors, but that to be strong we must be productively strong as well as militarily so, and productive strength cannot be effected by idle acres and idle workers on relief rolls. Furthermore, the United States today is lending financial assistance to many foreign countries, and stands ready to do more. This money must be *earned here in the United States*, and that can be done only by production at home. That is the way our wealth has been created in the past, and that is the way it will have to be created in the future.

Many of you gentlemen will undoubtedly be called upon by your congressional delegations as well as by your farmer citizens to express your views in connection with the proposed new sugar legislation. When that time comes I urge you most earnestly to consider the matter *first* from the standpoint of the domestic producer, from whom the money to pay for our present heavy defense program must be obtained, and *second* from the standpoint of the foreign importer and good neighbor. With that sequence in mind a program can undoubtedly be worked out if those of us who are interested in agriculture work together—a program that will be fair to Cuba and the Philippines and that will also be fair and satisfactory to our own American farmers and workers engaged in the production of this most important necessity of life—sugar.

Thank you.

Adopt Resolution

After listening to the address by Mr. Dahlberg the National Association of Commissioners, Secretaries and Directors of Agriculture adopted the following resolution:

BE IT RESOLVED by the National Association of Commissioners, Secretaries and Directors of Agriculture in national convention assembled, that we endorse the idea of a general inquiry into the sugar policies of our National Government with a view to the adoption of the most helpful sugar program from the standpoint of the domestic sugar industry; and

BE IT FURTHER RESOLVED that it is the sense of this meeting that Congress should enact a law providing increased quotas for producers of sugar in the United States, at least adequate to permit of efficiency in farming operations on sugarcane and sugar beet crops; and providing an adjustment of supply and demand in sugar

which will protect consumers against excessive prices and at the same time protect producers against losses and in their right to operate at a profit or to receive a parity price for their product; and also providing that the regulations of Government shall be limited to a reasonable adjustment of supply and demand in sugar and to the proper distribution of income among farmers and laborers and all persons engaged in the industry.

BE IT FURTHER RESOLVED that the Secretary is authorized to distribute copies of these resolutions to the press and to all members of this Association.

Sugar Quotas for 1941 Announced

(*Official Release*)

The Department of Agriculture announced on December 7th that the total supply of sugar required to meet consumers' needs for 1941 has been determined, under the provisions of the Sugar Act of 1937, as amended, to be 6,616,817 short tons, raw value.

On the basis of this determination, the quotas for the various sugar producing areas for 1941 which are established in accordance with certain percentage figures set forth in the Act, and the initial 1940 quotas are as follows:

Area	1941 (Short Tons, Raw Value)	1940
Domestic beet sugar	1,549,898	1,559,695
Mainland cane sugar	420,167	422,823
Hawaii	938,037	943,967
Puerto Rico	797,982	803,026
Virgin Islands	8,916	8,972
Commonwealth of the Philippine Islands	1,006,931	1,036,356
Cuba	1,869,060	1,923,680
Foreign Countries other than Cuba	25,826	26,581
TOTAL	6,616,817	6,725,100

The Sugar Act directs the Secretary of Agriculture to determine in December of each year the amount of sugar needed to meet requirements of consumers for the following calendar year. This determination must be made on the basis of a formula specified in the Act which establishes, as a base figure for the determination, the quantity of sugar distributed in the twelve months ending October 31 of the prior year and requires the Secretary to take into consideration deficiencies or surpluses in inventories of sugar, and changes in consumption. The Act also provides that such determination may be revised during the year as may be found necessary.

The quotas for the various sugar producing areas are established automatically from the figure of consumers' requirements in the following manner:

	Share of Market
Domestic beet sugar	23.19% or 1,549,898 tons, whichever is higher
Mainland cane sugar	6.29% or 420,167 tons, whichever is higher
Hawaii	14.04% or 938,037 tons, whichever is higher
Puerto Rico	11.94% or 797,982 tons, whichever is higher
Virgin Islands	.13% or 8,916 tons, whichever is higher
Total domestic areas	55.59% or 3,715,000 tons, whichever is higher

The balance of the total of consumers' requirements is allotted by the Act to the Commonwealth of the Philippine Islands (15.41%); Cuba (28.6%); and foreign countries other than Cuba (.40%).

Communiqués from the Washington Front

(*By C. J. Bourg*)

Consumption Estimate Considered Favorable

As we have been forthright in our criticisms of actions taken by the Sugar Division and the Secretary of Agriculture in the past, it is a pleasure and a satisfaction to be able to compliment them sincerely upon the estimate of consumption for 1941. It is the opinion of the domestic sugar industry that the estimate for 1941 will more nearly result in the adjustment of supply to demand than any estimate since the Sugar Act of 1937 has been in operation, assuming that no unexpected influences are brought to bear. It seems to be the unanimous opinion that an estimate of 6,616,817 short tons, raw value, of sugar will improve the price of sugar immediately and maintain a progressive trend throughout 1941. Therefore, we are pleased to state that this Determination should be considered as constructive and courageous action on the part of the Secretary of Agriculture and of the Sugar Division.

The announcement of the 1941 sugar quotas, appearing elsewhere in the *Sugar Bulletin*, brings out the fact that the domestic areas have been allotted the minimum quotas. The provisions of the Sugar Act require that any estimate of consumption lower than 6,682,670 tons establishes the minimum domestic quotas, and the reductions below that figure come out of foreign quotas, mostly Cuba. The estimate for 1941 is, therefore, approximately 66,000 tons under the statutory minimum basis and can correctly be interpreted as an indication that the Department of Agriculture has responded to the requests of the domestic industry to remove the depressing effect of excessive sugar supplies upon the price of sugar. It is also responsive to the spirit of the Amendment which was adopted as part of the Ellender Bill (S. 3237), which has been interpreted and accepted as a recognition by Congress of the fact that sugar prices had become too low to maintain the domestic sugar industry as a whole upon a properly remunerative level; thus, the domestic industry has reason to take encouragement from this announcement, in view of the fact that this is the first time since the Sugar Act of 1937 went into effect that the initial quota fixed by the Secretary under the Act is accepted in the sugar trade as representing, in fact, a reasonably accurate adjustment of supply to demand. May we express the hope that this is an indication of a favorable change in policy with respect to sugar prices and to the maintenance of the domestic sugar industry!

Farm Bureau Advocates Expansion

The matter of sugar legislation was discussed at some length at a Conference on Field Crops, which formed part of the program of the Convention of the American Farm Bureau Federation, held at Baltimore, Md., this week. With regard to the federal sugar program for 1942 and the future, the views of sugar beet growers were presented by George W. Wilson of California, and the views of the sugarcane growers were presented by Stephen C. Munson of Louisiana. The general discussion which lasted throughout the afternoon was under the chairmanship of Harry G. Chalkley, President of the Louisiana Farm Bureau, who made the very pertinent

argument that although he is a rice producer, he has a primary interest in the expansion and welfare of the domestic sugar industry because when all sugarcane lands in Louisiana are permitted to produce sugarcane, less rice is planted; and, when acreage is forced out of sugarcane, at least a part of it goes into the production of rice. Without going into the details of the discussions, it will be of interest to our growers to learn that the followng resolution was adopted by the Conference on Field Crops and recommended to the Convention for adoption as one of the policies of the American Farm Bureau Federation:

> "Sugar Legislation: The Federation re-affirms that conditions within the sugar industry of the United States require enactment of legislation for its sound economic adjustment, giving due consideration to producers and consumers alike. The Federation will support such legislation as will provide moderate expansion in the domestic areas, recognizing the varying relations, conditions and needs of each area, and as will provide for the maintenance of all necessary elements of the industry upon a properly remunerative level."

Pertinent Facts from Louisiana's Standpoint

As we begin to anticipate the new Session of Congress which will open January 3, 1941, we recall the very clear and correct statement of the Louisiana case made by Col. W. F. Giles, President of the American Sugar Cane League, when testifying before the Senate Finance Committee on October 3, 1940. We quote below at some length from the statement of Col. Giles because of its accuracy in stating the more pertinent facts, and also for the reason that it is well for all members of the American Sugar Cane League and other readers of the *Sugar Bulletin* to consider all the facts which deserve primary consideration from the standpoint of the Louisiana Sugar Industry, when the national sugar policies are determined by Congress in 1941 for the next several years:

"Certain persons opposed or antagonistic to the production of sugar in Louisiana have sought to create the impression that the Louisiana sugar industry has expanded and increased *acreage* out of all proportion and reason. We will let the statistics of the Department of Agriculture furnish the answer. According to the Bureau of Agricultural Economics, the acreage harvested for sugar in Louisiana has been as follows:

Year	Acres	Number of farms
1934	222,000	9,540
1935	239,000	9,547
1936	227,000	9,182
1937	254,000	10,383
1938	270,000	10,504
1939	238,000	11,255

"A simple comparison demonstrates that the acreage in 1939 was less than it was in 1935, 1937, or 1938, and very little above the acreage harvested in 1934. It is apparent from the figures that the acreage in Louisiana has been decreased. But, although the total acreage for Louisiana has been decreasing, the number of farms and of producers involved has been steadily increasing. To give some idea of the relation, let me point out that in 1934, there were 9,540 farms which produced sugarcane for sugar, but in 1939 the number of farms had increased to 11,255. The number of producers involved in 1934 was 15,570, while in 1939 there were 17,454. These figures tell our story more forcibly than any argument which might be presented.

"Fundamentally, the purpose of the sugar program has been stabilization. In 1934, the Louisiana sugar industry was composed of growers and processors who had maintained the production of sugar in Louisiana during periods of depression and disease, which tried men's souls—but they kept the industry alive. The new varieties of cane which had been seeded in Louisiana were beginning to produce an increased tonnage per acre of sugarcane and a greater number of pounds of sugar per ton of sugarcane. The original quota given in the Sugar Act of 1934 was based upon the then current production. As the productiveness per acre in pounds of sugar was being accomplished and the industry restored to the productiveness which it had enjoyed before the first World War and the mosaic disease, it soon became obvious that the original quota was entirely inadequate. Accordingly, the quota for the mainland cane area was established at 420,000 tons in the Sugar Act of 1937. The farmers who had maintained the industry and brought it back after many years of losses, appeared about to enjoy the fruits of their sacrifices and fortitude. However, the sugar program had established a parity price for sugarcane and the prolific yields of new varieties of seed cane had vindicated the faith of the farmers in that crop. Naturally, other farms which had abandoned that crop, sought to come back into the picture. At first, they were restrained and restricted by the quota and other provisions in the law. But, in 1937, the new sugar Act made an incidental provision for new growers. The officials of the Department of Agriculture placed great emphasis upon the authority given to extend the program to new growers.

"It is quite easy to understand how our problems became aggravated. The production of sugarcane per acre had increased from 13.6 tons in 1934 to 21.7 tons in 1938; instead of extracting 158 pounds of sugar from each ton of cane as in 1934, the Louisiana sugar industry averaged 168 pounds in 1938; thus, an acre of sugarcane land which had produced 2,148 pounds of sugar in 1934 was producing 3,645 pounds of sugar in 1938. In determining proportionate shares, our acreage necessarily had to be computed on the new productivity, which meant some acreage restriction, and we expected that. We also knew that if we wanted stabilization, we had to suffer some restrictions under the sugar program, although we have always felt that the home market really belongs to us to the extent of our ability to supply it. But, the introduction of new growers at a time when there was not sufficient quota really to take care of established growers, whose acreage had begun to yield returns from the vast sums of money and the mighty efforts in research to bring about new varieties, made a bad situation worse. So, the acreage of established growers has been reduced with a negative progressiveness, until we now anticipate that the sugar program, instead of giving us stabilization, is gradually destroying the efficiency and the economic balance of the industry which Congress intended should be encouraged and helped.

"We have advocated consistently that all farmers who have sugarcane lands in Louisiana should be allowed to produce sugar as long as the continental

production of sugar remains as low as 30 percent of the consumption of our own country. We have fought for the right of all of our farmers to participate in the sugar program, and we know that when all of them are permitted a sufficient acreage for an efficient operation, the prosperity of the State of Louisiana will be established. But no magician can continually restrict production with one hand and increase the number of producers with the other without finally causing hardships and losses to the body of the producing group as a whole. The obvious answer is that there must be an adjustment. It is still more obvious that, under the circumstances, the adjustment to be beneficial to the State of Louisiana must be made by increasing the quota and not by reducing the number of growers or the number of acres allowed each grower.

"Sugarcane is a mass-production crop. It must be recognized that men who own farms have to operate them on the basis of the value of the land and improvements, as well as the investments in drainage and physical constructions, mechanical implements, work stock, and so forth. The volume of production controls the success of any enterprise. One might suggest that there ought to be a greater distribution of acreage to more farmers, but this would be possible to do successfully only if the income would be sufficient to permit a profitable operation with less volume.

"Scientists of the Department of Agriculture are agreed as to the ratio of acreage in sugarcane and acreage in soil-building crops. This rotation has been practiced in Louisiana for more than 100 years. But having this rotation disrupted from year to year and the price of sugar being depressed by the manipulations of excessive supplies in the face of no increase in demand, makes it impossible for our sugarcane growers to enjoy the benefits of the sugar program. If the unit price is reduced by the administrators of the Sugar Act, and at the same time the unit cost is increased by the administrators of the Sugar Act, then there is no way to overcome these disadvantages except by producing the volume which is needed for the highest efficiency. We desire to maintain our progress toward the highest efficiency; but we are convinced, as we are sure you are, Senators, that an adjustment in quota, based upon experience and performance in acreage and production, is essential to a satisfactory solution of our problems."

Determination of Proportionate Shares for Farms in the Mainland Cane Sugar Area for the 1941 Crop

(*Federal Register November 30, 1940*)

Whereas, section 302 of the Sugar Act of 1937, as amended, provides in part as follows:

(a) The amount of sugar or liquid sugar with respect to which payment may be made shall be the amount of sugar or liquid sugar commercially recoverable as determined by the Secretary, from the sugar beets or sugarcane grown on the farm and marketed (or processed by the producer) not in excess of the proportionate share for the farm, as determined by the Secretary, of the quantity of sugar beets or sugarcane for the extraction of sugar or liquid sugar required to be processed to enable the producing area in which the crop of sugar beets or sugarcane is grown to meet the quota (and provide a normal carry-over inventory) estimated by the Secretary for such area for the calendar year during which the larger part of the sugar or liquid sugar from such crop normally would be marketed.

(b) In determining the proportionate shares with respect to a farm, the Secretary may take into consideration the past production on the farm of sugar beets and sugarcane marketed (or processed) for the extraction of sugar or liquid sugar and the ability to produce such sugar beets or sugarcane, and the Secretary shall, insofar as practicable, protect the interests of new producers and small producers and the interests of producers who are cash tenants, share-tenants, adherent planters, or share-croppers; and

Whereas, subsection (c) of section 301 of the said act provides, as one of the conditions for payment to producers of sugarcane and sugar beets, as follows:

(c) That there shall not have been marketed (or processed) an amount (in terms of planted acreage, weight, or recoverable sugar content) of sugar beets or sugarcane grown on the farm and used for the production of sugar or liquid sugar to be marketed in, or so as to compete with or otherwise directly affect interstate or foreign commerce, in excess of the proportionate share for the farm, as determined by the Secretary pursuant to the provisions of section 302, of the total quantity of sugar beets or sugarcane required to be processed to enable the area in which such sugar beets or sugarcane are produced to meet

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the quota (and provide a normal carry-over inventory) as estimated by the Secretary for such area for the calendar year during which the larger part of the sugar or liquid sugar from such crop normally would be marketed;

Now, therefore, pursuant to the foregoing sections of said act, I, Claude R. Wickar Secretary of Agriculture, do hereby make the following determination:

Proportionate shares for farms in the mainland cane sugar area for the 1941 crop—(a) *General.* The proportionate share of sugarcane, in terms of planted acres, for the 1941 crop for any farm in the mainland cane sugar area, except as provided in paragraphs (b), (c), and (d) hereof, shall be equal to the greater of either:

(1) The 1940 proportionate share for the farm, or

(2) the planted proportionate share acreage measured for harvest on the farm under the 1938 mainland sugarcane program.

In no event, however, shall the 1941 proportionate share for any such farm be greater than 90.75 per centum of the maximum proportionate shares obtainable for the farm under the 1938 mainland sugarcane program.

(b) *Proportionate shares for farms with proportionate shares for 1940 of ten acre or less and for new growers.* The proportionate share of sugarcane, in terms of planted acres, for the 1941 crop for any farm having a proportionate share for the 1940 crop of ten acres or less, or for any farm for which a proportionate share was not established in 1940 (new grower), shall be the greater of either:

(1) The planted proportionate share acreage measured for harvest on the farm under the 1940 mainland sugarcane program; or

(2) the lesser of either: (i) ten acres, or (ii) one-third of the acreage on the farm suitable for the production of sugarcane.

(c) *Proportionate shares for producer-owned and producer-controlled cooperatives.* The proportionate share for any farm operated by a producer-owned and producer-controlled cooperative association which is eligible to obtain a loan under or pursuant to any existing Act of Congress, and which was organized prior to the date hereof, shall not be less than the lesser of either:

(1) Ten acres multiplied by the number of members of the association engaged in the production of sugarcane on the farm, or

(2) one-third of the acreage on the farm suitable for the production of sugarcane.

(d) *Minimum proportionate share.* The minimum proportionate share for any farm in the mainland cane area for the 1941 crop shall be:

(1) For any farm on which the planted proportionate share acreage measured for harvest under the 1940 mainland sugarcane program was in excess of ten acres, not less than ten acres;

(2) for any farm for which a 1939 proportionate share was established under the proviso in paragraph (a) of the determination of proportionate shares for the 1939 crop, not less than the planted proportionate share acreage measured for harvest under the 1939 mainland sugarcane program; or

(3) in any event, not less than five acres.

(e) *Tenant and sharecropper protection.* The provisions of this determination are subject to the following conditions:

(1) That no change shall have been made in the leasing or cropping agreements for the purpose of diverting to producers any payment to which tenants or sharecroppers would be entitled if their 1940 leasing or cropping agreement were in effect;

(2) That there shall have been no interference by any producer with any contracts heretofore entered into by tenants or sharecroppers for the sale of their sugarcane or their share of the sugarcane produced on the farm.

Done at Washington, D. C., this 29th day of November 1940. Witness my hand and the seal of the Department of Agriculture.

(Signed) Claude R. Wickard,
Secretary of Agriculture.

Philippine Sugar to Require Certification Starting December 9

(*Official Release*)

The Sugar Division of the Agricultural Adjustment Administration announced December 3rd that beginning December 9, 1940, Philippine sugar entering the United States for further processing or for direct-consumption during the balance of the current year will require prior certification that such sugar is within the 1940 Philippine sugar quota of 982,441 short tons, raw value. Of this amount not more than 80,214 tons may be filled by direct-consumption sugar during any calendar year.

Requests made to the Sugar Division for certification should state the name of the steamer, date and port of arrival, approximate number of pounds of sugar, type and kind of sugar, approximate polarization of such sugar, and the 1940 Philippine sugar permit number.

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THE SUGAR BULLETIN

Entered to the second-class of mail matter April 13, 1925 at the post office at New Orleans, La., under Act of March 3, 1879

We stand for the encouragement of Home Industries as against Foreign Competition

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Definition of "Delivered" Sugar

We print below excerpts from correspondence between the Sugar Division, A.A.A., Department of Agriculture, and various sugar companies, relating to the "Definition of Marketing."

"The Department is of the opinion that

"Sugar lost, destroyed, or damaged in transit to a consignment point in the name of the processor should not be considered a delivery until the claim has been settled.

"If sugar has been lost or destroyed while enroute to a buyer and the processor at a later date delivers an equivalent quantity to the buyer and in exchange assumes any claim for damages against the transportation agency, this type of transaction is deemed to be a substitution of sugar and no change in the original date of delivery is deemed necessary. The processor should not consider the lost or destroyed sugar, represented by his claim against the transportation agency, as a delivery until the company's claim with such agency has been settled. If the buyer assumes the responsibility for recovering damages from the transportation agency the original delivery is deemed to have been consummated and in addition the replacement sugar delivered to the buyer by the processor should be considered a delivery during the year in which such replacement sugar was actually delivered.

"If sugar has been damaged while enroute to a buyer and the processor at a later date delivers an equivalent quantity to the buyer in exchange for such sugar, this type of transaction is deemed to be a substitution and no change in the original date of delivery is deemed necessary. In this instance, the processor has taken back into inventory the damaged sugar and has assumed the responsibility for recovering damages from the transportation agency. At the time the processor's claim with such agency has been settled, the processor's inventory should be reduced by the difference between the original quantity and the quantity on hand after reprocessing. However, if the buyer assumes the responsibility for recovering damages on the damaged sugar from the transportation agency, the original delivery is deemed to have been consummated. If the transportation agency should elect to keep the damaged sugar against which the processor is claiming damages, it would be deemed a delivery at the time the claim is settled.

"If the buyer should elect to cancel his contract by the amount equal to the sugar lost, destroyed, or damaged in transit, the processor's record of deliveries should be decreased by an equal amount as of the date the original record of delivery was made by the processor. Any claims by the processor against the transportation agency should not be considered a delivery until the claim with such agency has been settled."

* * * * *

"A cancellation of any type means that the processors record of deliveries shall be reduced by a corresponding amount for the year in which such delivery was recorded."

* * * * *

"Reference is made to your letter of * * * asking for an interpretation of the recent definition of 'marketing' issued by the Sugar Division. You state in your letter as follows:

'Will you please advise if under your interpretation the following would be considered a marketing of sugar during 1940 under 2(b)2 and 4(d) of your definition:

'(a) If on December 30, 1940, this Company bills * * * with the undelivered balance of contract, advise them that the sugar is held in our

THE
SUGAR BULLETIN
407 Carondelet St., New Orleans
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year.

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warehouse for and on their behalf, under the same date they acknowledged this in writing, on or about January 10, 1941, they pay the invoice in full, and take actual delivery during January or February 1941.

'(b) If in order to meet competition, this Company is obliged *not* to charge * * * with storage and insurance during the period the sugar is held for and on their behalf in our warehouse?

'(c) If this sugar is all billed at a delivered price in 100 lb. bags at * * *. However actual delivery may be made to different points, in different packages (5's, 10's, and 25's) and issuing bills for the differential in packages and delivered prices at that time.'

"The transaction described in (a) above would constitute a 'marketing' under the definition, provided the contract under which the sugar is delivered *permits* actual delivery of the 'undelivered balance' during the current quota year (4(c) of definition). If, for example, the contract calls for the delivery of the sugar 'on or before' a specified date, although that date is after the end of the quota year, the contract would be one which *permits* actual delivery during the quota year, within the meaning of the definition. If, however, the contract calls for delivery of the 'undelivered balance' of the sugar on a specified date after the quota year, and does not allow delivery within the quota year, the contract would not be one which *permits* actual delivery during the quota year.

"The fact that you do not charge storage and insurance during the time the sugar is held for and on behalf of the buyer would not alter the situation. Furthermore, exchanges of sugar, such as described in (c) above, would not prevent the transaction from constituting a 'marketing', if all requirements of the definition are met."

* * * * *

"Reference is made to your letter of * * * in which you ask the following questions regarding the recent definition of 'marketing' under the Sugar Act of 1937.

'Is it necessary under 3(b), when warehouse delivery advices are issued by the warehouse, to procure a receipt from the buyer for every warehouse delivery advice issued throughout the entire quota year, or, in those cases where the warehouse delivery advice is signed only by the warehouseman, would it be sufficient evidence of delivery if our record of payments clearly shows that payment for the delivery had been made in full during ing the quota year or by January 31 of the following year?'

"If the sugar is paid for in full during the quota year, it is our view that the buyer's receipt called for under 3(b) of the definition need not be obtained. However, it would not be possible to dispense with this requirement by the buyer's paying for the sugar during January of the following year. Paragraph 2 of the definition requires that delivery of sugar be made during the year in which the 'marketing' occurs, and paragraph 3 requires that the acts which are to constitute evidence of such delivery shall take place during the same year. Consequently, it is not possible to permit a delivery to be evidenced by an act on the part of the buyer which takes place the following year. The acts performed after the close of the quota year, which the definition recognizes, are not acts which constitute delivery or evidence of delivery. These acts relate only to the *bona fides* of the contract pursuant to which acts of delivery are made in the quota year."

* * * * *

"We gather from your letter of * * * that the * * * Company contemplate entering into a contract to deliver to * * * Company during the calendar year 1940, a certain quantity of granulated sugar. This sugar is to be charged against * * * (the former Company) 1940 marketing allotment. It is further gathered that there is an understanding between the parties pursuant to which the * * * (the former Company) is to purchase the identical sugar, or its equivalent, from the * * * (the latter company) after January 1, 1941, at the prevailing market price.

"If the first transaction is made without the understanding the repurchase of the sugar, there is no doubt that the delivery should be considered a 'marketing' as defined in section 4(a) of the 'Definition of Marketing'. However, if the * * * (the former company) has an agreement or understanding to repurchase the same sugar, or its equivalent, in 1941 it is the opinion of the Department that the original delivery of sugar in the calendar year 1940 was not a bona fide sale. Accordingly, the sugar delivered against a contract in 1940 cannot be considered a marketing against the 1940 allotment of the * * * (the former company).

Entries of Sugar Against Quotas for First Eleven Months of 1940

(Official Release)

The Sugar Division of the Agricultural Adjustment Administration recently issued its eleventh monthly report on the status of the 1940 sugar quotas for the various sugar-producing areas supplying the United States market. The sum of these quotas represents the quantity of sugar estimated, under the Sugar Act of 1937, to be required to meet consumers' needs during the current year.

The report shows that the quantity of sugar charged against the quotas for all offshore areas, including the full-duty countries, during the first 11 months of the year, amounted to 4,222,311 short tons, raw value, as compared with 4,493,303 tons in the corresponding period of 1939.

The report includes sugar from all areas recorded as entered or certified for entry before December 1, 1940. The figures are subject to change after final outturn weight and polarization data for all importations are available.

There were 228,846 short tons of sugar, raw value, charged against the quota for the mainland cane area and 1,352,430 short tons, raw value, against the quota for the continental sugar beet area during the period January-October this year. Data for these two areas are not yet available for November.

The quantities charged against the quotas for the off-shore areas during the first 11 months of the year and the balances remaining are as follows:

Area	1940 Sugar Quota established under the latest regulations	Quantity charged against quota	Balance Remaining
	(short tons—96° equivalent)		
Cuba	1,749,744	1,710,319*	39,425
Philippines	982,441	919,379	63,062
Puerto Rico	797,982	733,602	64,380
Hawaii	938,037	850,109	87,928
Virgin Islands	8,916	0	8,916
Foreign Countries other than Cuba	24,177	8,902	15,275
Total	4,501,297	4,222,311	278,986

*An additional 4,501 tons were entered but an export quota credit of an equivalent amount has been made under the provisions of Section 211(a) of the Sugar Act of 1937.

Direct-Consumption Sugars

Direct-consumption sugar is included in the above amounts charged against the various quotas.

Area	1940 Quota	Quantity charged against quota			Balance Remaining
		Sugar Polarizing 99.8 degrees and above	Sugar Polarizing less than 99.8 degrees	Total Charges	
	(short tons—96° equivalent)				
Cuba	375,000	358,254	16,746	375,000	0
Puerto Rico	*	163,904	11,072	174,976	0
Hawaii	29,616	8,560	0	8,560	21,056
Philippines	80,214	57,973	550	58,523	21,691

*Under the Sugar Act of 1937, as amended on October 15, 1940, the direct-consumption quota for Puerto Rico this year is not to be less than the quantity of such sugar actually brought into the continental United States, for consumption therein, up to and including October 15, 1940. Based on preliminary data this figure is 174,976 short tons, raw value.

Quotas for Full-Duty Countries

Area	1940 Quota	Quantity charged against quota[1]	Balance Remaining
	(in pounds)	(in pounds)	(in pounds)
China and Hongkong	278,782	234,322	44,460
Dominican Republic	6,452,490	5,865,011	587,479
Haiti	891,763	304,210	587,553
Mexico	5,836,506	645,751	5,190,755
Peru	10,754,118	10,754,118[3]	0
Quotas not used to date	23,640,341[2]	----------	23,640,341
Unallotted reserve	500,000	0	500,000
Total	48,354,000	17,803,412	30,550,588
Tons	24,177	8,902	15,275

1In accordance with Sec. 212 of the Sugar Act of 1937, the first ten short tons of sugar, raw value, imported from any foreign country other than Cuba have not been charged against the quota for that country.

2This total includes the following (in pounds): Argentina, 14,105; Australia, 197; Belgium, 284,776; Brazil, 1,158; British Malaya, 25; Canada, 545,931; Colombia, 258; Costa Rica, 19,930; Czechoslovakia, 254,774; Dutch East Indies, 204,537; Dutch West Indies, 6; France, 169; Germany, 114; Guatemala, 324,055; Honduras, 3,321,388; Italy, 1,694; Japan, 3,879; Netherlands, 210,808; Nicaragua, 9,889,949; Salvador, 7,942,670; United Kingdom, 339,309; Venezuela, 280,609.

Six hundred fifteen pounds have been imported from Canada, 263 pounds from Chile, 47 pounds from France, 104 pounds from Panama, 90 pounds from Venezuela, 20 pounds from the French West Indies, 88 pounds from Brazil, and 439 pounds from Guatemala, but under the provisions of Sec. 212 of the Sugar Act, referred to in footnote 1, these importations have not been charged against the quota.

3In addition, 704,746 lbs. were entered from Peru before reduction of the quotas on August 26, 1940.

Handling of Excess-Quota Sugar in the Continental United States

(General Sugar Regulations, Series 2, No. 5, Revised)

By virtue of the authority vested in the Secretary of Agriculture by the Sugar Act of 1937, as amended, I, Claude Wickard, Secretary of Agriculture, in order to carry out the powers vested in me by the said act, do hereby make, prescribe, publish, and give public notice of these regulations, which shall have the force and effect of law and shall continue in force and effect until amended or superseded by regulations hereafter made by the Secretary of Agriculture.

Section 801.41 *Definitions.* As used in these regulations:

(a) The term "act" means the Sugar Act of 1937, as amended;

(b) The term "Secretary" means the Secretary of Agriculture of the United States.

(c) The term "quota" means the quota fixed by the Secretary for the mainland can sugar area and for the domestic beet sugar area pursuant to the act;

(d) The term "allotment" means any allotment of the quota made by the Secretary pursuant to section 205(a) of the act;

(e) The term "processor" means any person engaged in the manufacture of sugar from sugar beets or sugarcane grown in the continental United States; and

(f) The term "excess-quota sugar" means all sugar owned by a processor after the allotment for such processor for the current year has been filled, or, if no allotment has been made, all sugar owned by a processor after the applicable quota for the current year has been filled.

Sec. 801.42 *Processing excess-quota sugar under bond.* Excess quota sugar produced from sugarcane grown in the continental United States may be marketed for further processing upon the following conditions:

(a) That the processor file with the Secretary an application setting forth adequate reasons regarding the necessity for such marketing and full information re-

garding the quantity and type of sugar, approximate polarization, identification marks, and the place where the sugar is stored; and

(b) That the person to whom the sugar is delivered shall furnish a bond, with a surety or sureties satisfactory to the Secretary and in such amount as the Secretary shall determine, obligating such person to segregate physically the sugar within 30 days, or such shorter period as may be designated by the Secretary, and to hold such sugar, or an equivalent amount thereof, apart from all other sugar until the beginning of the next calendar year.

Sec. 801.43 *Marketing of excess-quota sugar.* Excess-quota sugar produced from sugar beets or sugarcane grown in the continental United States may be marketed if the processor is the owner of an equivalent amount of quota sugar produced in the same area, or else has entered into a contract for the purchase of an equivalent amount of such sugar and takes delivery thereof at the commencement of the current crop, but not later than December 1 of the current year, and holds such sugar until the beginning of the next calendar year.

Sec. 801.44 *Cancelation of bond.* The Secretary may cancel or release any bond given under Sec. 801.42 hereof to the extent that such cancelation or release is necessary to permit the marketing of any increase in the applicable quota or in the allotment made to the person furnishing such bond.

Sec. 801.45 *Designation of agent.* The Chief, or the Acting Chief, of the Sugar Division of the Agricultural Adjustment Administration and the officer in charge of the Baton Rouge office of the Agricultural Adjustment Administration, or the acting officer in charge thereof, are hereby designated to act, jointly or severally, as agents of the Secretary in administering the provisions of these regulations, except that the authority of the latter shall extend only to the application of such provisions to sugar produced from sugarcane.

Sec. 801.46 *Rescission of prior regulations.* These regulations (Secs. 801.41 to 801.45) shall supersede General Sugar Regulations, Series 2, No. 5, issued May 24, 1939.

In Testimony Wherfof, I have hereunto set my hand and caused the official seal of the Department of Agriculture to be affixed in the District of Columbia, city of Washington, this 18 day of December, 1940.

Claude Wickard, *Secretary of Agriculture.*

Washington Reports

(By C. J. Bourg)

Marketing Quotas Re-Allotted

In order to make sure that the Mainland Cane Area will be able to market its full 1940 quota of 420,167 tons, the Sugar Division, A.A.A., has revised the original allotments to processors. This was accomplished by the voluntary action of those processors whose reduced production in 1940 has made it impracticable for them to market all of the allotment originally granted. By written surrender of unused marketing allotment and by a waiver of public hearing, submitted voluntarily and co-operatively by various processors, it became possible for the Sugar Division to permit those processors who had sugar available for distribution in 1940 to fill the deficits of those who did not have sufficient production to deliver their allotments. Thus, considerable red tape was cut, and the administration of the quotas was made fluid enough, by loosening the strict regulations, to save the enjoyment of marketing allotments to the Louisiana sugar industry as a whole. At a time when the industry is being brought distressingly to the full realization of what the disastrous crop year of 1940 means in dollars and cents to the laborer, to the grower, and to the processor, the practical action of the Sugar Division must be encouraging to all, as it is bound to be helpful in reducing the marketing problems of the industry.

The original allotments were announced on May 1, 1940, based upon the formula contained in Section 205 of the Sugar Act of 1937, following a public hearing held in Louisiana earlier in the year. The total of marketing allotments remains the same, but the re-allocations have fixed matters so that those who are able to market sugar will be given the opportunity to insure the ability of Louisiana to fill its entire quota of 362,152 tons.

Although marketing allotments are made to processors,—each and every grower of sugarcane has a very direct interest in these allotments, just as they have a direct interest in the orderly marketing of Louisiana-produced sugar. Obviously, the amount of sugar marketing in 1940 will determine what will be the carryover inventory of Louisiana sugar into 1941. The volume of sugar available on January 1st must be considered in connection with the proportionate-share acreage allotted to growers each year, because under the law, the proportionate-share production is fixed on the basis of the amount of sugar needed to supply the marketing quota, plus a normal carryover inventory and a reasonable reserve supply for eventualities. It is easy to see that when Louisiana might fail to market all of its quota in one year, the amount of sugar carried over into the next year would necessarily be greater and would, therefore, affect the acreage allotments of growers, as well as the marketing allotments, for two crop years. This is just another example of how completely the interests of growers and processors are merged together, when one considers the practical welfare of the Louisiana sugar industry as a whole.

There appears elsewhere in this issue a table, prepared by the General Manager of the League, showing the effect of the re-allotment order.

Farm Organizations Talk Sugar

When Congress begins to consider the type of sugar program to be put into effect after the present law expires on December 31, 1941, they will have the benefit and guidance of expressions from several national farmer organizations. The support which sugarcane and sugar beet growers are receiving from farm organizations whose members are engaged in the production of all kinds of crops in the United States, is proof that there is developing an understanding among farmers that the general pattern of agricultural legislation cannot be used for sugar. The general farm program is necessarily based upon the problems of crops that have surpluses which have to find markets outside of the continental United States. The common sense of permitting our farmers to produce more of a crop which is needed at home for domestic consumption, becomes very evident to other farmers who are groping about trying to find the best way to overcome their own marketing difficulties caused by surplus production.

The rice and cotton farmers of the South know

(Continued on page 6)

AMERICAN CYANAMID COMPANY
30 ROCKEFELLER PLAZA
NEW YORK

CABLE ADDRESS LIMENITRO

TELEPHONE CIRCLE 7-0100

January, 1941.

Dear Sugar Grower:

'Aero' Cyanamid has gained its popularity and become the Universal Cane Fertilizer - not through sales drives and advertising, but because it has proved its worth. It fills the bill. Its use results in increased yields of quality cane.

The sugar-cane soils of Louisiana are largely alluvial in origin, and are so rich that their only fertilizer requirement is Nitrogen. 'Aero' Cyanamid contains over one-third more Nitrogen than most other kinds of fertilizer.

But Nitrogen without Lime increases soil acidity, resulting in reduced cane yields. 'Aero' Cyanamid contains 70 per cent of Lime - more than most grades of agricultural limestone.

There are many reasons for buying 'Aero' Cyanamid - the Universal Cane Fertilizer. We might point out that it is very resistant to leaching; that it is easy to apply; that it feeds the crop evenly. But it is enough that it supplies more nitrogen, in a better chemical combination, at no greater cost per ton.

We wish you a Happy New Year and a very Prosperous Season.

Very truly yours,

H. R. Kelly
District Sales Manager

that the expansion of sugarcane production in the South would take acreage out of rice and cotton; the dairy farmers of the North have already felt the encroachment of farmers who are not permitted to use their acreage in the crop which they have been used to producing, and the result has been that they have the additional worries of seeing some of their United States market being taken over by new local production; the farmers of the Mid-West have seen their attempts to cut down the production of grains largely nullified by farmers forced out of other crops; and the prospect of acreage reductions in the sugar beet area emphasizes that situation and causes grain farmers to inquire as to the reasons for restricting and reducing sugar production when there is such an excess of consumption demand over domestic supply. Gradually, farmers all over the country are beginning to realize that there is a national agricultural aspect to the sugar program, which concerns all farmers and is not limited merely to the concern of growers who produce sugarcane and sugar beets. The thinking of these farmers is definitely reflected in the Resolutions which have been adopted in recent weeks by national farm organizations, three of the more important ones being:

The Resolution of the American Farm Bureau Federation is as follows:

"Sugar Program: We believe that the situation of sugar producers requires revision and re-enactment of legislation for the sound adjustment of their industry and which will give proper consideration to producers and consumers. We will support legislation along these lines and providing for a moderate expansion in domestic areas, and which takes account of varying relations, conditions and needs in the several areas, and which will provide for the maintenance of all parts of the industry upon a properly remunerative level."

The Resolution of the National Grange is as follows:

"The National Grange favors:

"Action by the Department of Agriculture to permit increased acreage of sugar beets and sugar cane to meet the demands of the domestic sugar market; with added protection for American sugar beet and cane farmers, through changed tariff schedules or otherwise.

"Assure the American market to the American farmer to the limit of his ability to supply it by: (a) Terminating at the earliest possible date all trade treaties that are proving harmful to agriculture; * * * and (d) Extending incentive payments to encourage production of new crops which may prove useful, especially in contributing to an efficient defense program."

The Resolution of the National Association of Commissioners, Secretaries and Directors of Agriculture is as follows:

"BE IT FURTHER RESOLVED that it is the sense of this meeting that Congress should enact a law providing increased quotas for producers of sugar in the United States, at least adequate to permit of efficiency in farming operations on sugarcane and sugar beet crops; and providing an adjustment of supply and demand in sugar which will protect consumers against excessive prices and at the same time protect producers against losses and in their right to operate at a profit or to receive a parity price for their product; and also providing that the regulations of Government shall be limited to a reasonable adjustment of supply and demand in sugar and to the proper distribution of income among farmers and laborers and all persons engaged in the industry."

Puerto Rican Direct Consumption Sugar Allotments for 1941 Announced

(*Official Release*)

The Sugar Division of the Agricultural Adjustment Administration announced December 3rd the allotments of the portion of the Puerto Rican sugar quota for 1941 which may be brought into the United States as direct consumption sugar. Total annual shipments of direct consumption sugar from Puerto Rico to continental United States are limited to 126,033 short tons, raw value, under the Sugar Act of 1937. The direct consumption sugar quota will be part of Puerto Rico's total quota for next year. These quotas for the various areas supplying the United States market have not yet been established for 1941.

The allotment order follows a public hearing held in Washington, D. C., on November 12, 1940. At this hearing there was presented a stipulation, signed by all Puerto Rican processors of direct consumption sugar, in which they agreed that the quota for such sugar should be allotted in amounts proposed by the processors.

The allotments made in accordance with this request of the processors are as follows:

FOR SALE
STRICTLY #1 Second Hand
Selected, thoroughly mended Blue Stripe Cuban
RAW SUGAR BAGS
QUALITY AND SERVICE GUARANTEED!
The HARDIN BAG & BURLAP CO., INC.
NEW ORLEANS, LA. U.S.A.

Name of Processor	Allotment in terms of short tons, raw value
Porto Rico American Refinery, Inc.	79,237
Central Aguirre	3,534
Central Guanica	4,690
Central Igualdad	13,017
Central Roig	15,028
Central San Francisco	1,766
Central Camuy	3,742
	121,014
Unallotted reserve for marketings of raw sugar for direct consumption	5,019
Total	126,033

Revised 1940 Marketing Quotas

We tabulate below the original 1940 sugar marketing quotas for the processors of the mainland cane area issued April 27, 1940, in Mainland Cane Sugar Order No. 2, along with the revised marketing allotments for the mainland cane processors for 1940. Additions to original quotas are shown in the last column.

PROCESSOR	Original 1940 Sugar Quota-Short Tons	Revised 1940 Quota-Short Tons	Addition to Original Marketing Quota
Alma Plantation	5,896	4,104	
J. Aron & Co.	6,295	6,639	344
Billeaud Sugar Fac.	8,535	8,959	424
Blanchard Planting Co.	2,041	2,301	260
Caire & Graugnard	2,880	2,410	
Caldwell Sugars	5,742	6,473	731
A. & J. E. Champagne	146		
Columbia Sugar Co.	3,446	3,885	439
Cora-Texas Mfg. Co.	3,776	4,257	481
Cypremort Sugar Co.	5,224	5,889	665
Delgado-Albania Plt.	5,102	5,752	650
Dugas & LeBlanc, Ltd.	6,708	7,562	854
Duhe & Bourgeois Sugar	5,465	6,161	696
Erath Sugar Co.	8,048	8,738	690
Evan Hall Sugar Coop.	9,415	6,910	
Evangeline Pepper & F.	2,764	2,682	
W. Prescott Foster	5,890	6,640	750
E. J. Gay Pltg. & Mfg.	2,716	3,062	346
Glenwood Sugar Coop.	5,161	5,818	657
Godchaux Sugars, Inc.	28,445	20,525	
Haas Invest. Co.	2,696	3,039	343
Helvetia Sugar Coop.	3,974	2,248	
Iberia Sugar Co.	8,667	9,770	1,103
M. J. Kahao	213		
Kessler & Sternfels	277	142	
Lafourche Sugar Co.	5,682	4,067	
T. Lanaux's Sons	110		
Harry L. Laws & Co.	13,470	15,185	1,715
Levert-St. John, Inc.	8,371	7,031	
La. Penitentiary Bd.	4,546	3,119	
Magnolia Sugar Coop.	3,479	3,922	443
Maryland Co.	3,520	2,420	
S. M. Mayer	59		
Meeker Sugar Ref. Co.	5,413	4,044	
La. State Univ.	350	193	
Milliken & Farwell	12,015	12,739	724
M. A. Patout & Son	5,544	4,382	
Poplar Grove Pltg.	5,707	3,900	
Realty Operators	28,319	31,925	3,606
Roane Sugars	4,962	3,482	
E. G. Robichaux Co.	4,570	4,430	
Ruth Sugar Co.	2,483	2,320	
St. James Operators	455		
San Francisco Pltg. Co.	1,409	1,588	179
Clarence J. Savoie	5,696	6,421	725
Shadyside Co.	4,777	5,385	608
Slack Bros. Inc.	2,788	2,925	137
Smedes Bros. Inc.	2,859	3,223	364
T. M. Soniat	3,179	3,584	405
South Coast Corp.	27,593	31,106	3,513
Sterling Sugars, Inc.	10,466	11,799	1,333
J. Supple's Sons Pltg.	4,499	4,292	
Tally-Ho, Inc.	3,867	2,182	
Teche Sugar Co.	3,992	4,500	508
Valentine Sugars, Inc.	7,928	6,265	
Vermilion Sugar Co.	5,528	4,968	
Vida Sugars, Inc.	3,303	2,576	
Waguespack Pltg. Co.	206	232	26
Waterford Sugar Coop.	4,810	5,422	612
Waverly	140	158	18
Webre-Steib Co. Ltd.	776	875	99
A. Wilbert's Sons	5,735	6,465	730
Youngsville Sugar Co.	5,459	4,297	
Baldwin Factory	1,050	1,011	
Breaux Bridge Sugar Co.	5,051	5,694	643
McCollam Bros.	93		
D. Moresi's Sons	2,371	2,673	302
Fellsmere Sugar Prod.	3,797	4,280	483
U. S. Sugar Corp.	54,218	61,121	6,903
	420,167	420,167	33,509

Editorial Change

As of January 1, 1941, the General Manager of the American Sugar Cane League, Mr. Marcel J. Voorhies, becomes Editor of *The Sugar Bulletin*.

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against Foreign Competition

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1940 In Review

(*By C. J. Bourg*)

Membership of the League

The full representative character of any organization is best exemplified by the ratio of eligible members to its dues-paid membership. While browsing through the old files, we ran across a copy of the *Sugar Bulletin* for October 15, 1928, which is only twelve years ago. In the Annual Report of the General Manager of the American Sugar Cane League, we find him proudly pointing to a membership of 2,764. We quote a few sentences:

"The American Sugar Cane League now has 2,764 members. That is the number who paid their dues for the year 1928. Contrasted with the membership rolls of the sugar organizations existing in Louisiana prior to the formation of the League in 1922, a total of 2,764 members in good standing is a very impressive and remarkable exhibit. At the time that it was absorbed by the League six years ago the American Cane Growers' Association, which up to that time had carried on the work of safe-guarding the Louisiana sugar industry at Washington, devoting itself almost exclusively to that sphere of activity, had only 44 members in good standing. The Producers and Manufacturers' Protective Association, another of the organizations absorbed by the League, had 35 members at the high tide of its career, but at the time of the merger there were not half that number who had paid their dues and it owed a considerable sum of money which it could not pay and this debt was assumed by the League and paid. The Louisiana Sugar Planters' Association, the third of the organizations absorbed by the League, had an indeterminate membership, inasmuch as membership was free to anybody of good repute who wanted to take part in its monthly meetings and discussions. If the attendance at its monthly meetings may be taken as an index of the active membership it had less than 25 members. It did have considerable money and property, however, which it kept and still has."

Just eighteen years ago, the American Sugar Cane League was organized with an initial roll-call of approximately 100 members. It was natural that in 1928 a membership of 2,764 should be considered something to write about. Today, the American Sugar Cane League has a paid-up membership of 9671 as of 1940, which is well over a 9000% increase from the beginning and a 350% increase in the last decade. More remarkable than the percentage of increase in numbers is the fact that according to the last published official records of the Department of Agriculture, there were 11,255 farms in Louisiana producing sugarcane for sugar in 1939, under the program of the Sugar Act. We are fairly certain that no other farm organization, representing an entire industry, can produce a better record of membership in proportion to number of farmers represented and eligible.

Sugar Prices in 1940

The Department of Agriculture publishes a volume of Agricultural Statistics each year, and we have received a copy of the 1940 Agricultural Statistics. There are three tables on sugar prices which are of particular interest, as we look back upon 1940 as a sugar-year.

Table 202 gives the *raw* cane sugar (96°, centrifugal) average wholesale price per pound, New York, 1930-40:

Year	Average Price	Year	Average Price
1930	3.4c	1935	3.2c
1931	3.3	1936	3.6
1932	2.9	1937	3.5
1933	3.2	1938	3.0
1934	2.9	1939	3.0
		*1940	2.8

THE
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MARCEL J. VOORHIES, Editor
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The American Cane Growers' Assn.
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The statistics for the calendar *1940 are not given beyond the month of May, in Agricultural Statistics 1940, but as the volume states that some of its statistics are "compiled from Lamborn's Sugar Market Report, New York," we have added the average price published by trade market reports for 1940 in the above and in subsequent tables.

We have made a search of price records for the past century, and we are unable to find that anywhere in the history of the United States has the price of raw sugar failed to reach 3c during some months in each year. For instance, in 1932 a price of 3c and better is shown for six out of twelve months; and in 1934, a price better than 3c is shown for four out of twelve months. In all other years, the average price is above 3c for the year. It is perfectly obvious that due to provisions of the Sugar Act, the Wage and Hour Act, and because of restricted production of domestic sugar, the cost of producing sugar has certainly not been reduced, and during the national defense emergency is expected to increase as all materials and labor become more expensive.

Table 203 gives the *refined* sugar average wholesale price per pound, New York, 1930-40:

Year	Average Price	Year	Average Price
1930	4.624c	1935	4.316c
1931	4.430	1936	4.691
1932	3.990	1937	4.551
1933	4.316	1938	3.916
1934	4.123	1939	4.037
	*1940	3.802	

The above figures do not include the processing tax which was in effect from June, 1934, to January, 1936, and the excise tax which has been in effect from September 1, 1937, to date.

Table 204 gives the granulated sugar average *retail* price per pound, United States, 1930-40:

Year	Average Price	Year	Average Price
1930	6.2c	1935	5.7c
1931	5.7	1936	5.6
1932	5.1	1937	5.6
1933	5.4	1938	5.3
1934	5.6	1939	5.4
	*1940	5.2	

The above data are averages of retail prices reported by retail dealers as of the 15th of each month, in 51 of the larger cities of the United States, compiled and issued by the Bureau of Labor Statistics, Department of Labor.

A study of the above tables indicates that the all-time low average prices for raw sugar and refined sugar are likewise reflected in the low retail price paid by consumers. Those persons who may sometimes wonder why the various representatives of domestic sugar-producing areas have complained so bitterly and constantly about the price levels of sugar in 1940 and recent years, will surely find the business or commercial answers to any doubt which may exist as to the justification for our complaints and appeals. It is only fair to state that during the year 1940, the Secretary of Agriculture and the Sugar Division have several times issued statements or taken action indicating that they have recognized the sugar price levels as being too low. Congress recognized the situation in the amendment to Section 201 of the Sugar Act which was adopted as part of the Ellender Bill (S. J. 225) in October.

1940 Sugar Dates of Interest to Our Members

Jan. 1—Quotas for 1940, totaling 6,725,100 tons based on estimate of consumption previously made, go into effect.

Jan. 8—Rationing of sugar in England reduced to 12 oz. per person per week.

Jan. 15—Cuban sugar crop limited by decree to 2,792,805 long tons.

Jan. 27—Sugarcane crop seriously affected by freeze in Mainland Cane Area.

Feb. 23—Quotas for 1940 reduced to 6,607,745 tons.

Feb. 28—Secretary of Agriculture upheld by District of Columbia Court of Appeals in denying application of two idle Louisiana plants when allotting marketing allotments under Sugar Act.

Feb. 29—Hearings begin on marketing allotments for Mainland Cane Area.

Mar. 4—Wage rates determined for Mainland Cane Area on production and cultivation.

Mar. 7—Mainland Cane Area proportionate-share acreage announced.

Mar. 9—Sugar Division announced that all sugar beets planted can be harvested in 1940 as proportionate shares.

Apr. 10—S. 3237 passes Senate, amending child labor regulations in Sugar Act.

Apr. 10—Hearings on amendments to and extension of Sugar Act begin before House Agriculture Committee.

Apr. 12—President Roosevelt instructs House Agriculture Committee not to amend Sugar Act but

merely to extend it.

May 1—Marketing allotments to processors of Mainland Cane Area for 1940 announced.

May 1—Reports indicate increases in world sugar supplies.

May 16—Rationing of sugar in England reduced to 8 oz. per person per week.

May 24—Sugar Division makes announcement, stating that declines in sugar markets not justified by statistical picture.

June 17—S. 3237 passes House.

June 20—Extension of Sugar Act for one year adopted by the House of Representatives with one amendment restricting limitations on direct-consumption sugar from Hawaii and Puerto Rico.

June 26—S. 3237 signed by President.

July 11—Sugar Division announces that re-allotments of quotas will not be made because of ample supply of sugar and low price.

July 29—Hearings begin on harvesting wages and prices of sugarcane.

Aug. 21—Raw sugar is sold for 2.61c per pound, which is low price for year.

Aug. 26—Secretary of Agriculture cuts 1940 quotas again to 6,471,362 tons.

Sep. 12—Tentative 1941 proportionate shares for Mainland Cane Area proposed.

Oct. 1—Senate passes Ellender Bill (S. J. 225) regarding sugarcane proportionate shares and also amending Section 201 of Sugar Act on price control.

Oct. 3—House adopts Ellender Bill (S. J. 225).

Oct. 4—Senate adopts House Bill to extend Sugar Act.

Oct. 10—Ellender Bill (S. J. 225) signed by President.

Oct. 11—Processing of sugarcane into raw or direct-consumption sugar declared exempt from hours provisions of Wage and Hour Act.

Oct. 15—Extension of Sugar Act signed by President.

Oct. 22—Harvesting wage rates in Mainland Cane Area announced.

Oct. 24—Normal yield based on average of 1937-38-39 (instead of 1935-36) for abandonment and deficiency payments.

Oct. 26—Sugar Division announced fair price for cane and terms of purchase contract between growers and processors.

Oct. 26—Announcement made by Sugar Division that the practice of refining sugar in bond would not be permitted in December.

Nov. 14—Freezes further damage already short crop in Louisiana.

Nov. 29—Proportionate-share acreage for Mainland Cane Area in 1941 officially determined.

Dec. 7—Estimate of consumption for 1941 set at 6,616,817 tons.

Dec. 22—Re-allotment of marketing quotas to processors in Louisiana and Florida, to assist Area in filling its quota, announced.

Bonne Année

Our wish to all for the New Year is that we may avoid the many unpleasant and harmful things which could happen in foreign relations and domestic affairs during 1941.

The Sugar Cane Variety Situation

(W. G. Taggart)

Poor yields, no matter what the crop may be, bring about a state of uneasiness on the part of the grower which always results in a stage of despondency and sometimes develops even a degree of panic. The 1940 cane crop came too close to that produced in the period represented by 1926 for the effect of it to pass without causing grave fears to arise in the minds of many if not most of the thinking men of this industry. This habit of man in general to fear disaster may be said to be a safeguard which nature has thrown around him for his own protection. Too much or too easy a success usually lulls us into a satisfied life of ease which causes a loss of constructive thought. On the other hand, panic is a condition in which but few men are capable of thinking soundly or constructively. It is a condition to be avoided.

On account of the poor crop of 1940, there is a great deal of interest being shown in new varieties of sugar cane at this time. While this interest has been lively right along, it has been stimulated now by fear that we are approaching another sugar cane variety disaster similar to that of nineteen or twenty years ago. I would not do anything to lessen the interest on the part of the growers in new and better varieties, but on the other hand, I will not be a part in creating panic.

We have known and have said on more than one occasion that we have not developed a "super cane" for Louisiana. We have developed and given to the industry good canes which have been the life of the industry in a time of trying circumstances. We have also pointed out that as we raised the sugar producing possibilities of the farmers' acres by giving them better canes, we have made our own jobs harder to fill. Let us review the history of the past decade or so and see just where we stand right now with reference to varieties of sugar canes as well as some things we can do to help ourselves along the road which is none too smooth but probably as straight as the roads traveled by other farmers of this country.

Back in the days of the Noble canes, the average yields of sugar for years hinged around 136 pounds per ton, and the industry made some money or at least it lived. Then disaster truly overwhelmed us. For awhile all we did was to fuss and flounder. Then, in 1926, we got P.O.J. 234 which made cane rich enough for profitable yields of sugar per ton, but not enough tons. Then came P.O.J. 213 and 36, and shortly thereafter P.O.J. 36-M. P.O.J. 213 was for awhile a wonderful cane from the farmers' standpoint. It was about on a level with the Noble canes when we measured it by its ability to make sugar at the factory. Even with that shortcoming, we thought much of it and we multiplied it even though the Pathologists told us that it was susceptible to Red Rot. Perhaps it was this variety which taught us to pay more attention to the laboratory tests as conduced by the Pathologists. It was not many years before we got complaints regarding stands, and but few more before P.O.J. 213 was out of the planting plans.

P.O.J. 36 and its sport 36-M were of a different type. In fact, they were our first strong canes from a disease viewpoint. They contracted mosaic disease but made cane in spite of it. However, these canes were not highly satisfactory except in some localities.

When other canes which grew as well as they, and at the same time gave more sugar per ton came on, these P.O.J. canes were discarded, not because they had failed or gone backward, but just because we had better canes. So far as they are capable of going, we could easily reinstate them, but at the present price of sugar, I doubt their ability to maintain an industry.

In 1930, we released two canes for commercial planting. One of these, C.P. 807, like P.O.J. 213 was known by the Pathologists to be susceptible to Red Rot. It, however, did not seem to contract the disease to any great degree when grown in the fields. It was thought to be very resistant to mosaic, and for a long time it showed no mosaic in the fields. It was the first of the United States bred canes to show commercial possibilities and it was released for trial. The cane did remarkably well on some soil types, and in fact still is a mainstay on a limited secton in the Southwest. In the course of time, a new strain of mosaic attacked this cane, particularly in lower Lafourche Parish. This type of mosaic was very severe but did not show an ability to spread rapidly as the old mosaic had done. For that reason, it was an easy matter to control the disease by the simple process of cutting cane from fields known to be healthy. Red Rot too finally showed up in C.P. 807, and in some local spots did damage. Neither of the diseases were responsible for discontinuing the cane. As in the case of the P.O.J. canes, it was largely discontinued because a better cane was found to take its place.

Co. 281 was the other cane released in 1930. For awhile the cane did not show mosaic disease, but in due course of time, it too contracted the disease. It was largely planted because of its ability to keep for a long time when windrowed. While mosaic does decrease the yield of this variety, its effect is not so severe as in the case of some of the other canes. The loss from the disease is enough to justify an effort to keep a supply of disease free cane, and a very limited number of planters are making that effort to their advantage. In 1933, three years after the release of the above two canes, Co. 290 was given to the planters with the distinct understanding that it was a cane to be tried out. Here at Baton Rouge, the sucrose content of Co. 290 was hardly good enough to justify its release, but on some of the test fields, it showed commercial possibilities. On the black lands of the lower river along Bayou Teche and in the western parishes, it has proved to be a good cane. On the Teche, it proved to be the best cane that that territory ever had and on some large tracts, it was planted almost to the exclusion of all others. This variety contracts mosaic slowly, but when the disease is once picked up, it is kept and the cane is severely hurt. In most of the belt, nothing was done to stop the ravages of the disease until there was one hundred per cent infestation and a large drop in tonnage resulted. In one parish in particular, a determined and planned fight was made against mosaic in Co. 290 and the yields are still high and the infestation of mosaic is low. Planters of that parish for the past two years have been selling seed cane to planters in other parishes at a price that shows real generosity. The facts in the matter are that they are satisfied with the profits which they make from the high yields secured through planting healthy cane.

One year later, we released two good canes, namely, C.P. 28-11 and 28-19. Both of these canes give good yields and high sucrose. C.P. 28-19 proved to be the richest cane of any that we have had released. C.P. 28-11, like Co. 290, contracted mosaic slowly and retained the disease whenever it picked it up. C.P. 28-19 has the ability to throw off the mild forms of mosaic and is hurt materially only by the Yellow Strain which it seldom contracts. This variety unfortunately does not develop the strong root system of the other commercial canes and is therefore attacked by root rot. This weakness confines its use to the better drained and preferably the lighter soils. C.P. 28-11 is a bad land cane unsurpassed. This variety will grow and make marketable cane under conditions where others fail.

In 1935, again one year after releasing new varieties, C.P. 29-320 was distributed. This is one of the two richest canes which we have. It has done for the upper river soils what 28-19 did for the lower river soils.

In 1936, C.P. 29-116 like Co. 290 was released for trial by the cane growers. It was suggested that this variety might supplement or even substitute for Co. 290. Up to date, this variety has shown only a trace of mosaic disease and it is very resistant to Red Rot. The Pathologists consider it the strongest cane pathologically of all the released varieties. It is low in fiber, large of barrel, and a good producer. Wherever it can be made to mature satisfactorily, it is becoming more and more popular.

In 1939, two new canes were released. C.P. 29-103 was found to grow well and to mature on rich lake bottom lands in Iberia Parish and was released on that account. From experiments conducted at Baton Rouge, it was known that this cane was able to stand up well after being frozen and it is attracting favorable attention to itself at this time on that account. C.P. 29-120, the other variety of the year, is an unattractive looking cane and it is expensive to strip. Nevertheless, it is a fairly high yielding variety which has shown some windrowing qualities and it will grow in the western section where Co. 281 is almost a failure. So far, this cane has not shown any diseases. Because of the possibility of mosaic disease spreading from Co. 281 to our more resistant and better canes, we have been anxious to find a windrowing cane which could be substituted for Co. 281. If C.P. 29-120 should become popular, it would answer the purpose to a considerable extent.

What of the variety situation? Are we in danger of going out of business because the varieties are failing? We now have nine commercial varieties and at least six of them are good to grow over a wide part of the cane territory. We know that it is true that diseases have made some inroads on these canes, but I do not consider that even one of them is in danger of failing us in the near future. Back of the commercial canes which we are now growing is the cane breeding work still going on, and we have at least eight or ten new varieties that could be shoved into a gap if a break came. None of these might be as satisfactory as are the best of what we have, but four of them would have a reasonable chance of filling the requirements. All four are being planted to increased acreage for larger tests over more territory and it is fairly certain that two, three, or maybe all four will be up for release in the near future.

Remember that I have said that our task of developing a better cane has become harder. Every time that we turn loose a cane which is superior to those

we had, it is just one more lift of the hurdles and the jump is pretty stiff when we try to go over Co. 290 in St. Mary Parish, or C. P. 28-19 and C.P. 29-320 along the rivers.

It seems to me that the success which we met with for a few years tended to spoil the cane growers. They became so used to coming to us for a new cane every year that they did not listen when we told them that they should start fighting mosaic by planting clean seed. Dr. Edgerton has reported over and over the results of planting healthy seed cane in comparison to mosaic infested seed cane. He has also reported on the susceptibility of the different varieties. Shafer in La. Bulletin 308, "Seed Selection and Rogueing in the Practical Control of Mosaic Disease of Sugar Cane in Louisiana" gives results of work along the lines done here at Baton Rouge. Simon in April, 1939, published an article by request of the Contract Committee of the American Sugar Cane League in the *Sugar Bulletin,* an article in which he gave valuable information on the disease situation along with suggestions as to how the cane grower should go about helping himself. All of this effort has not fallen on deaf ears. Some work to control mosaic has been done, but not nearly enough. The County Agents will gladly lend their aid to any farmer who wants assistance in getting a clean seed program started. The members of the staffs of both stations are always glad to contribute as far as their regular duties will allow. The men of the Federal as well as the State station are proud of the confidence which the cane growers in Louisiana have in them and they are going to continue to work to keep that confidence.

We will release new varieties as fast as they can be developed. I am sure, however, that the cane growers will find it highly profitable if they will assist us by trying to keep a good supply of healthy seed cane in their fields. C.P. 28-19, 29-320, 29-116, 29-103 and 29-120 just need watching for mosaic and for chlorotic streak at this time. Co. 290 and C.P. 2811 can be kept in a healthy condition by a reasonable amount of systematic rogueing. Co. 281 is still our most valuable windrowing cane, and until we do find a full substitute for it we will continue to grow it. Clean seed of that variety is a more difficult job, but it too can be had.

Now in conclusion I would like to call attention to one thing. In times of uneasiness, men are much more liable to go out and bring in canes from whatever source they may be had than is the case under normal conditions. It is through the introduction of new canes that we get new pests. A few years ago chlorotic streak got into the state. How, we do not know, but it most likely came through the introduction of a new variety of cane. It is now scattered widely over the state and it is going to cause us a lot of trouble before it is done with. The State Station has not introduced a single seed piece except through the Federal Quarantine or through the Houma Station in the case of Canal Point seedlings, and so far we have found no chlorotic streak in our fields. We try to keep up with all the new canes in the world that might be of value to Louisiana, and we get them through the Quarantine System. If there is a cane that someone wants, it would be wise to let it come through the quarantine. There are pests, both insects and diseases, which are more damaging than those we now have in Louisiana. The danger of introducing them is far too great to allow us to bring canes in indiscriminately. What is the use of taking a chance of introducing new pests when we have a safe quarantine system set up to guard us against this danger?

Production Record of Sugarcane Per Acre and Pounds of Sugar Per Acre By Parishes—1937-1938-1939

(Marcel J. Voorhies)

Parishes Producing Sugarcane for Sugar 1937 - 1938 - 1939	Average Number Acres Harvested for Sugar 1937 - 1938 - 1939	Weighted Average Yield of Sugarcane for Sugar per Acre, Ton 1937 - 1938 - 1939	Weighted Average Pounds of 96-Sugar Produced per Acre 1937 - 1938 - 1939
Acadia	9[1]	9.58	1377
Ascension	9521	19.17	3017
Assumption	20911	24.14	3992
Avoyelles	3215	19.59	3196
East Baton Rouge	668	17.62	2777
Evangeline	29	14.00	2397
Iberia	29045	20.18	3331
Iberville	20949	22.80	3626
Lafayette	13101	15.85	2569
Lafourche	19293	23.60	3946
Plaquemine	286	10.68	1732
Pointe Coupee	12504	19.59	3157
Rapides	2264	20.33	3321
St. Charles	2584	16.29	2617
St. James	11461	20.62	3431
St. John	12829	22.52	3822
St. Landry	2032	19.19	3048
St. Martin	14949	18.11	2935
St. Mary	24811	20.38	3649
Terrebonne	28648	21.35	3560
Vermilion	10720	18.94	3009
West Baton Rouge	14217	20.99	3440
West Feliciana	3254	26.50	4032
St. Bernard	164[2]	11.51	1570
Jefferson	94[3]	7.85	1418

[1] Only 1937-1938
[2] Only 1937
[3] Only 1939

The above tabulated figures of Louisiana sugar production for 1937, 1938 and 1939, figured from AAA records, present a challenge that the producers of sugarcane cannot very well afford to ignore.

There are a lot of things that sugarcane farmers need which individual farmers cannot do very much about, but which must be left to the industry as a whole to secure. Among the major items in that category are: (a) new and better varieties, (b) larger quotas so that individual farmers may better balance their farm program and (c) better prices. These larger over-all needs constitute the special mission of the American Sugar Cane League as an organized force representing the Louisiana sugar industry in all of its phases. With respect to new and better varieties the co-operation of the League with the Federal and State Experiment Stations has been most fruitful. Co-operative efforts along that line are still continuing because they are on a permanent basis and to that has been added the new work which is the development of cold resisting cane varieties. The problems of larger quotas and more favorable prices are matters which continually engage the efforts of the League. Through Committees composed of leading sugarcane producers working through the Washington representative maintained in the Washington office of the League, work is continually being done to secure more equitable quotas and fairer prices.

The efficiency of the Louisiana sugar industry measured in terms of yield of sugar per acre has over a long period shown gratifying improvement. Records of production from 1888 through 1936 indicate an average annual production of 2,323 pounds of sugar per acre. The record of production for 1937, 1938 and 1939 indicates an average acreage production of 3,499 pounds of sugar per acre. This represents an increase per acre of 1,176 pounds of sugar which at the present unfavorable price of $2.90 for

raw sugar means over $34.00 per acre.

This tremendous improvement and increased efficiency did not just happen. It represents the results of continuous and persistent organized efforts. There is still lots more to do. Even our gratifying production record of 1937, 1938 and 1939 is marred by disastrous variations in the average production of the various parishes. For instance during that period Lafayette averaged 2,569 pounds of sugar per acre and Assumption averaged 3,992 pounds of sugar per acre. Under the present price structure this represents a difference in value of $41.26 per acre. All the other parishes lie somewhere between these two extremes. West Feliciana, while showing the largest production, is eliminated from consideration because it represents only one farm.

The variation in the production per acre of different farms in one parish is more pronounced than the variation between parishes. Certainly there are a number of things that the average sugarcane farmer can and must do to increase his yield per acre, which is one of the main factors in reducing the unit cost of production and results in more net dollars to the farmer for his efforts.

In subsequent issues of the *Bulletin* it is proposed to discuss in non-technical language a number of factors involved in the better production and higher yield per acre such as seed plots, rotations, soil preparation, variety adaptation to soil type, time and method of planting, cultivation, fertilization, insect and disease control, etc.

Reference Qualification of Windrowed Sugarcane Acreage for Deficiency Payments

December 28, 1940

Mr. G. J. Durbin, Officer in Charge
Agricultural Adjustment Administration
University, Louisiana

Dear Mr. Durbin:

Reference is made to your letter of December 14, 1940 concerning the status of sugarcane with respect to eligibility for abandonment or deficiency payments.

Eligibility of sugarcane (damaged by freeze or other causes, so that it is unfit for grinding) for deficiency payments rather than abandonment payments under section 303 of the act depends on whether the sugarcane acreage in question can be considered as harvested acreage. From the standpoint of procedure, the determination of whether any given sugarcane acreage is harvested acreage should be a finding of fact by the county committee. Such finding in each individual case will be reflected in the entries of basic data on the respective application for payment and the county committee's certification of the application.

In view of the many variable factors in the situation, it is impossible to establish a specifc definition of harvested acreage. In the absence of specific standards, the county committee, in making a finding of fact with respect to harvested acreage on any farm, shall be guided by the following considerations:

1. Any acreage of sugarcane on which all harvesting operations (namely, cutting, topping, and stripping) have been performed should be considered as harvested acreage.

2. In the case of any acreage of sugarcane on which all of the harvesting operations have not been performed, but on which the sugarcane has been cut and windrowed, the criterion of harvesting shall be the intent of the grower to deliver such sugarcane to a processor for the extraction of sugar. The acreage of windrowed sugarcane should be considered as harvested acreage if (1) the windrowing was performed in accordance with accepted practice in Louisiana, (2) if sugarcane so windrowed which is grown on the farm or on adjacent farms has been rejected by a processor because of freeze, or other, damage which made it unfit for grinding, (3) if the producer files with the county committee a signed statement that he windrowed the acreage in question with the intention of delivering it to a processor for the extraction of sugar, and (4) if the windrowing was performed at a time prior to the close of the mill to which the grower delivered his cane (last mill to close in case the grower delivered to more than one mill) which would have enabled the grower to make routine delivery of the cane to the processor under normal conditions. All of the above four points should be established to the satisfaction of the county committee.

Sugarcane acreage which has been determined to have been harvested but which was not processed for the extraction of sugar should be deemed to be a total loss for the purpose of computing the amount of sugar with respect to which a deficiency payment is to be made. Such acreage is also subject to all of the conditions for payment, including the non-employment of child labor and the payment of fair and reasonable wages.

Very truly yours,
JOSHUA BERNHARDT
Chief, Sugar Division.

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American Sugar Cane League Production Report

Tons of Sugar Cane Ground for Sugar.....2,982,728

Sugar Production 1940—Pounds Raw Basis	Short Tons, Raw Basis
Raws 354,762,003	177,381.0
Clarified 2,587,549	1,293.8
Turbinado 33,346,713	16,673.4
Washed Raws 2,472,961	1,236.5
Granulated 74,928,459	37,464.2
String 2,814,961	1,407.5
470,912,646	235,456.4

Recoverable 96° Sugar in Molasses and Syrup

Gallons	Short Tons 96° Sugar Equivalent
1st Molasses 1,224,042	2,002.76
2nd Molasses 1,481,536	1,820.10
Syrup 1,567,318	4,592.88
	8,415.74

Gals. Blackstrap Molasses 15,384,342

Committee Meetings

On December 5th the Finance Committee met at Thibodaux to consider the budget of operation for the year 1941. Present: Messrs. R. H. Chadwick, Chairman, Frank L. Barker, W. C. Kemper, J. J. Shaffer, Jr., Chas. A. Farwell, and Marcel J. Voorhies.

After studying a detailed report of the expenditures of the League for the year 1940 a budget for 1941 was adopted for recommendation to the Executive Committee.

The Executive Committee met at the New Orleans office on December 18th. Present: Messrs. W. F. Giles, President, W. C. Kemper, M. J. Voorhies, Frank L. Barker, R. H. Chadwick, Charles A. Farwell, Edward J. Gay, Walter Godchaux, Jr., Warren Harang, Louis Robichaux, Stephen C. Munson, George M. Murrell, David W. Pipes, Dubourg Thibaut, and Louis Wilbert, members of the Committee. Congressmen-Elect James Domengeaux, Hale Boggs, and J. Y. Sanders, Jr. were present by invitation. Present also were Messrs. Paul G. Borron, Jr., L. G. Ebeling and Walter A. Sullivan.

After discussion on the floor the budget for 1941 recommended by the Finance Committee was adopted by the meeting.

The meeting took cognizance of Mr. Jules Godchaux's absence because of illness and directed that Mr. Godchaux be informed of the concern of the Committee about his health.

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THE SUGAR BULLETIN

Entered to the second-class of mail matter April 13, 1925 at the post office at New Orleans, La., under Act of March 3, 1879

We stand for the encouragement of Home Industries as against Foreign Competition

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Method of Sugar Cane Cultivation Practiced by Sterling Sugars, Inc.

(A Paper by E. J. Badeaux, Field Superintendent, Presented to the Louisiana Sugar Cane Technologists' Association June 18th, 1940)

Messrs. W. G. Taggart and C. B. Gouaux have extended an invitation to the writer to prepare a paper on the method practiced by Sterling Sugars, Inc., in the cultivation of sugar cane, inasmuch as it deviates somewhat from the customary method practiced in Louisiana. In response to this invitation, I wish to relate briefly the rather unorthodox method we have been experimenting with lately.

(1) *Soil Preparation*: Fall ploughing, turning under the summer legume crop (95% of which is Soya Beans) is usually started in the latter part of July, weather permitting. The land is thoroughly broken with tractor plows, and deep drains are maintained in order to insure good drainage. The preparation of land for cane planting is started as soon as the legumes have sufficiently decomposed. The top of the row is opened with a double mouldboard plow which is attached in front of a tractor double disc harrow, thereby opening the row and closing back in one operation. This work is followed by running a mule drag harrow which flattens the row and leaves it in a mulched condition, ready for the opening plow.

(2) *Planting Cane*: The planting furrow is opened with a two mule plow, either No. 9 or 10, and followed with a double-mouldboard which flukes the planting furrow out. The cane is covered with a No. 7 or 8 single plow (one mule) to a depth of about 4 inches. It is left in this condition for four or five weeks, when a tractor two row cultivator or tractor double disc harrow is used to shape the row and sink the middles to provide drainage for the coming winter rains. The cross-drains are ploughed out deep, shoveled and spaded.

(3) *Cultivation of Plant Cane*: In a normal season when the time comes to begin hoeing or scraping plant cane, the root system is well developed. Many roots are pruned by barring-off deep with plows, which is generally the system practiced. Therefore, in order to avoid pruning roots, home made scrapers which are attached to Walking Molines are used, instead of plows, to bar-off. These scrapers are made with discarded mouldboards. They make a cut or furrow on the sides of the row approximately 15 inches wide and 4 inches in depth, thus leaving the cane on a modified bar of approximately 12 to 14 inches, ready for the hoes. When hoed, the dirt is brought back immediately with a tractor double disc harrow. The front discs are reversed to throw the dirt toward the middles and the back ones to bring dirt back—thereby reestablishing the row. This leaves a wide flat-top row in an ideal condition for the next cultivation, which is done with spring-tooth, rotary hoe, and hinged drag harrows. This latter operation keeps young weeds down, maintains good tilth and also preserves moisture in case of too much dry weather. We cultivate with these light implements two or three times, depending on the weather conditions, and until the cane has suckered sufficiently to take dirt. The cultivation then is done with the heavier implements, such as tractor two-row cultivators, double disc harrows and sometimes mule plows. These implements are worked as deep as possible, making plenty of loose dirt which is put on the hip of the row, and later sifted in the drill with mule disc cultivator and also spring tooth. As it is our aim from the beginning of cultivation to the lay-

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407 Carondelet St., New Orleans

MARCEL J. VOORHIES, Editor

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The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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by to minimize the pruning of roots, we sometimes find it necessary to discard these heavy instruments if weather conditions in late May and early June prohibit their use.

(4) *Lay-by*: The lay-by is accomplished by taking two furrows with mule plows in the middles, followed with flukes pushing the dirt as high as possible on the side of the row, and completed with mule disc cultivators. On rare occasions when we find it necessary to fertilize plant cane, which is never more than about 10% of the plant cane acreage, two light furrows are taken with molines or single plows well down the side of the row and not deep enough to prune many roots. The fertilizer is distributed against the sides of the middles rather than straddling the row. In a normal season no deep ploughing is done after June 15th. In plant cane, a modified row is maintained throughout.

(5) *Cultivation of Stubble*: Wrapping middles and deep barring-off of stubble has been discontinued for several years. In cases, however, where the cane was harvested in a wet spell and the middles were badly cut, they are wrapped. The following method has been adopted: On about the first of March the stubble is chopped with a tractor double disc harrow. The front discs are set to bar-off light (about 4 to 5 inches deep and a width of approximately 15 inches across the top of the row). The back set of discs are set to bring the dirt back to the row, but not flush with the top—leaving the bar described above exposed about 3 to 3-½ inches. This cultivation enables the air and heat to enter, thereby warming the land, and in case of too much dry weather, preserves the moisture, and if too wet, insures better drainage. Our main reason for not barring-off deep and narrow is to preserve the root system as much as possible. Quoting from Louisiana Extension Bulletin No. 151: "Experiments have shown conclusively that the old root system functions in feeding young cane until it has established its own root system, and for that reason, as much as possible should be left intact as late in the season as is practicable." The hoeing of stubble begins as soon as the hoeing of plant cane has been completed. The off-bar is done with plows, very light, to a depth of 4 to 5 inches and 12 to 14 inches across the top. When hoed, the dirt is brought back with a tractor double disc harrow, same setting as described above, with the exception that the back discs are set this time to bring the dirt flush with the top of the row. When the stubble shows sufficient stand, it is fertilized. Plows are used to off-bar well down the side of the row as is done in plant cane and the fertilizer applied in a like manner. To cover the fertilizer, we use tractor two row cultivators and double disc harrows. From then on, the cultivation is the same as practiced in plant cane.

(6) *Cost of Cultivation*: (Labor only). In 1939, we cultivated 2167.50 acres of sugar cane at a cost of $13,279.62, or an average cost of $6.127 per acre.

(7) *Production*:

Acreage Milled	Tons Produced	Yield per acre
1965.27	48,516.895 Actual	24.68
	54,240.392 Converted	27.60
	5,723.497 or 11.80%	

In conclusion, the writer hopes that he has made himself clear in describing the method practiced by his Company. However, should anyone desire to ask questions, he will endeavor to answer them.

Yield Per Acre and the Cost of Producing Sugar Cane on Large Farms in Louisiana in 1937 and 1938

(By Roy A. Ballinger)

Studies have been made by the Louisiana Agricultural Experiment Station of the cost of producing sugar cane on large farms in Louisiana in 1937 and 1938. These farms are operated entirely with hired labor, rather than with family labor. The studies show that the cost per ton varied widely between farms. There was a corresponding variation in the income received. Doubtless there are a great many factors which influence these variations. Some of these, such as weather, are the result of natural causes which cannot be controlled by the farm operators. Other factors are largely or entirely under the control of the management.

One of the most important factors associated with variations in cost per ton of cane sold was the yield per acre. Differences in yield on different farms in the same year are partly a result of weather conditions and partly a result of variations in production practices, which are under the control of the management. In 1937 the cost per ton of cane sold on farms with yields under 22 tons per acre was 76 cents higher than it was on farms with yields of 25 tons or more per acre. This is equal to 19 per cent of the cost on the farms with high yields. In 1938

the difference in cost was 44 cents per ton or 11 per cent. The difference in net income after interest amounted to 93 cents per ton in favor of the farms with high yields in 1937, but was only 30 cents per ton in 1938.

Incidentally, it should be noted that in both years the farms with the highest yields had smaller acreages in cane than did the remaining farms. Also, they had a smaller percentage of their cultivated area in cane. The number of tons of cane sold on the high yield farms was also smaller than on the remaining farms, although the difference was not as great as that in the number of acres in cane.

Relation between the yield per acre of cane and the financial results obtained on large farms in Louisiana in 1937 and 1938.

Yield of cane per acre (tons)	Number of farms[1]	Results per ton of cane sold			Acres in cane	Per cent of cultivated area in cane	Cane sold
		Total cost ($)	Total Income ($)	Net income after interest ($)			(Tons)
1937							
Under 22.00	16	4.67	4.23	−.44	1,674	66.7	29,228
22.00 to 24.99	9	4.89	4.27	−.62	1,462	62.3	30,949
25.00 and over	8	3.91	4.40	.49	1,048	55.5	25,553
All farms	33	4.57	4.28	−.29	1,465	63.3	28,806
1938							
Under 22.00	9	4.57	4.08	−.49	1,496	62.7	29,325
22.00 to 24.99	13	4.12	3.94	−.18	1,715	62.7	37,171
25.00 and over	13	4.13	3.94	−.19	764	60.6	19,165
All farms	35	4.24	3.98	−.26	1,305	62.2	28,465

[1] The number of farms is greater than the number of farm owners. Where a single owner operated two or more distinct tracts of land for which records were kept separately, each tract was counted as a farm.

Yield of Sugar Per Ton of Cane Ground and Costs of Operating Louisiana Sugar Mills in 1937 and 1938

(By Roy A. Ballinger)

One of the most important factors associated with variations in the profitableness of sugar mill operations in Louisiana is the number of pounds of sugar manufactured per ton of cane ground. Variations in this yield are caused by two factors. One of these is the percentage of sucrose in the cane, and the other is the technical efficiency of the mill. Variations in the sucrose content of the cane are, at least partly, compensated for by corresponding variations in the price paid for cane by the mill. Variations in the technical efficiency of the mill remain to affect the financial results achieved.

A study made by the Louisiana Agricultural Experiment Station shows that in both 1937 and 1938 the total costs per 100 pounds of raw sugar manufactured declined as the yield of sugar secured by the mills increased. The extreme difference in costs amounted to 58 cents per 100 pounds of sugar in 1937 and to 55 cents in 1938. Also the average yield of sugar for the entire group of mills was 170.35 pounds per ton of cane in 1938 as compared with 154.75 pounds in 1937. The average cost per 100 pounds of sugar manufactured was 59 cents lower in 1938 than in 1937.

As would be expected, the net income after interest was higher for the mills with a high yield of sugar than it was for the other mills. In 1937 the extreme difference between groups of mills was 31 cents per 100 pounds of sugar manufactured. In 1938 it was 59 cents. Each year these sums represented the difference between a considerable loss and a reasonable profit.

It is also significant that in both years the mills which secured the highest yield of sugar were those that ground the largest tonnage of cane. There was no consistent relationship between the yield of sugar and the sucrose content of the cane ground by different mills. In 1937 the mills with the highest yield of sugar ground cane with the lowest sucrose content. In 1938 the situation was reversed. However, in both years the mills which secured the highest yield recovered in sugar a higher percentage of the sucrose present in the cane they ground than did the mills with lower yields of sugar. Apparently the larger and more modern mills were more profitable than the other mills.

Relation between the yield of sugar obtained per ton of cane and the financial results obtained by sugar mills in Louisiana in 1937 and 1938

Pounds of sugar obtained per ton of cane	Number of mills	Results per 100 pounds of sugar manufactured			Tons of cane ground	Per cent of sucrose in cane	Per cent of sucrose recovered in sugar
		Total Cost $	Total Income $	Net income after interest $			
1937							
Under 150	6	3.91	3.72	−.19	58,116	8.6	71.4
150 to 159.99	14	3.45	3.42	−.03	80,053	9.0	80.7
160 and over	8	3.33	3.45	.12	91,059	8.1	81.4
All mills	28	3.48	3.47	−.01	78,497	8.6	79.4
1938							
Under 150	4	3.32	2.87	−.45	57,083	9.9	72.5
150 to 159.99	5	2.99	2.95	−.04	77,937	10.1	75.2
160 to 169.99	6	2.80	2.80	*	97,795	10.2	78.0
170 to 179.99	11	2.77	2.91	.14	85,860	10.5	79.7
180 and over	4	2.96	3.03	.07	121,053	11.0	82.1
All mills	30	2.89	2.92	.03	87,782	10.4	78.6

* Less than $.005.

Mainland Cane Sugar Area Wages Announced

The Sugar Division of the Agricultural Adjustment Administration today announced that the minimum wages to be paid laborers in the production and cultivation of sugarcane in the mainland cane sugar area in 1941 by producers who apply for conditional payments under the Sugar Act of 1937, are the same as in 1940. The mainland cane area comprises Louisiana and Florida.

The Act requires, among other conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugarcane be paid in full by growers for all such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable, after public hearing and investigation. Public hearings were held in New Orleans, New Iberia, and Donaldsonville, Louisiana, and in Clewiston, Florida, in July and August, 1940.

The basic working day for adult laborers has again been defined as a day of 9 hours. Workers between the ages of 14 and 16 may not be hired to work for more than 8 hours per day. The Act prohibits the hiring of children below 14 by growers who wish to qualify for federal payments.

The rates provided in the determination are as follows:

Louisiana—Tractor drivers not less than $1.50, and teamsters not less than $1.20 per day of 9 hours. For a working day longer or shorter than 9 hours, not less than 17 and 13 cents per hour for tractor drivers and teamsters, respectively.

All other adult male workers not less than $1.20, and adult female workers not less than $1 per day of 9 hours. For a working day longer or shorter than 9 hours, not less than 13 and 11 cents per hour for adult male and female workers, respectively.

Workers between the ages of 14 and 16 not less

than 90 cents per day of 8 hours. For a working day shorter than 8 hours, not less than 12 cents per hour.

Florida—Tractor drivers not less than $1.80 per day of 9 hours. For a working day longer or shorter than 9 hours, not less than 20 cents per hour.

All other adult male workers not less than $1.60, and adult female workers not less than $1.30, per day of 9 hours. For a working day longer or shorter than 9 hours, not less than 18 and 14 cents per hour, for adult male and female workers, respectively.

Workers between the ages of 14 and 16 not less than $1.20 per day of 8 hours. For a working day shorter than 8 hours, not less than 15 cents per hour.

The wage determination also provides that if work is performed on a piece rate basis, the earnings per hour or per day are not to be less than the applicable rates per hour or day specified in the determination.

It is also provided in the determination that the producer is to furnish the laborer, without charge, the customary accessories, such as a house, a garden plot with facilities for its cultivation, pasture for livestock, medical attention, and similar incidentals.

Acreage for 1941 Sugar Beet Program Announced

The Sugar Division of the Agricultural Adjustment Administration announced on December 15th that the total of 1941 sugar beet acreage allotments on which conditional payments are to be made to producers has been established at 820,000 acres. This compares with an approximate acreage of 990,000 acres planted in each of the three years 1938, 1939 and 1940, and with an average of 833,000 planted acres in the 10-year period 1928-37, which preceded the present sugar program.

It has been estimated that a total of 805,000 acres will produce a quantity of sugar sufficient to meet quota and carryover requirements, but because of the shrinkage which takes place in the distribution of the total acreage among individual growers, the higher figure of 820,000 acres is to be allotted.

The 1941 reduction, the first to be made in the total beet area since the sugar programs began in 1934, is required under the Sugar Act of 1937. Record production in the continental beet area during the last three years has resulted in the accuumulation of larger than normal stocks of sugar. The Sugar Act requires that a balance be maintained between an area's sugar production and its marketing quota and carryover.

The 1941 crop acreage allotment will not affect the quantity of beet sugar which the beet area may market in the calendar year 1941. Under the provisions of the 1937 Act, the initial 1941 marketing quota for the beet area, announced December 7, 1940, is 1,549,898 tons, raw value, or the same as the 1940 quota. The share of the United States sugar quota allotted to each area is determined by a percentage formula in the Sugar Act. A minimum quota provision prevents the combined shares of the domestic areas from being reduced below 3,715,000 tons, and determines a minimum beet sugar quota. This provision kept the beet area's 1940 marketing quota at 1,549,898 tons and will maintain it at least, at the same level in 1941.

The 1940 beet sugar production is expected to be the largest in the area's history—approxmiately 1,850,000 short tons, raw value. Moreover, the 1940 crop followed the record crops of 1,803,000 tons and 1,760,000 tons in 1938 and 1939, respectively. This means that the three crops planted since the present Act was enacted have averaged 1,804,000 tons, compared with an average of 1,347,000 tons for the 1935, 1936 and 1937 crops, an average annual increase of 457,000 tons. The marketing quota established under the Act for the beet area has averaged about 1,550,000 tons annually, although in 1939 when the quota system was suspended, the area was unable to market 240,000 tons more sugar than would have been possible had the quotas previously established remained in effect.

The yields of beet-sugar per planted acre have increased substantially in recent years, going from an average of 1.64 tons in the 1935-37 period to 1.83 tons in the 1938-40 period.

The views of sugar producers on the manner in which the 1941 acreage should be distributed among individual growers are being sought by Department officials at the close of each of five public hearings on fair wages and prices which are being held in the beet area. The schedule of these hearings is as follows: Detroit, Michigan, December 9; St. Paul, Minnesota, December 11; Billings, Montana, December 13; Salt Lake City, Utah, December 16; and Denver, Colorado, December 18.

The sugar quota system plus the sugar program payments have made it possible for growers to receive parity or near parity returns for their beets since 1934. The effectiveness of the quota system in maintaining domestic prices is indicated at the present time when cane sugar refined in the United States is offered for export at about 1.60 cents per pound as compared with a quoted domestic wholesale price of 4.35 cents per pound.

The other domestic sugar producing areas have already had reductions in sugar acreage under prior Federal sugar programs. The mainland cane area, comprising Louisiana and Florida, reduced its acreage 25 percent after producing in 1938 the largest crop in history. Puerto Rican sugar producers reduced their production approximately 30 percent under the first sugar programs launched in that area and have made adjustments in their production in virtually every year since that time. Hawaiian sugar production was reduced about 10 percent early in the program and has remained at that lower level under the Sugar Act. The Jones-Costigan Act of 1934, the predecessor of present sugar legislation, provided for a 1934-35 sugar adjustment program in the Commonwealth of the Philippine Islands under which sugar growers there reduced their production 55 percent from that of the 1933-34 crop. Under the provision of the Sugar Act which establishes a minimum for domestic sugar quotas, imports from Cuba in 1940 were at the lowest level in almost 30 years, except for 1933.

NOTE. When there is a surplus of United States sugar, the Department of Agriculture reduces sugar acreage; when there is a surplus of Cuban sugar, the United States Import-Export Bank arranges a loan of approximately 100% of cost to increase production in Cuba.

The answer is up to the sugar growers of the United States, and Congress.

Sugar Statistics for First 11 Months of 1940 Aunounced By Sugar Division

Washington, D .C., January 4, 1941

The Sugar Division of the Agricultural Adjustment Administration today issued its monthly statistical statement covering the first eleven months of 1940, consolidating reports obtained from cane sugar refiners, beet sugar processors, importers, and others.

Total deliveries of sugar during the period January-November, 1940, amounted to 6,321,806 short tons, raw value, compared with 6,314,316 tons during the corresponding period last year. Distribution of sugar in continental United States during the first eleven months of 1940, in short tons, raw value, was as follows:

Raw Sugar by Refiners (Table 1)	7,515
Refined Sugar by Refiners (Table 2, less exports)	4,091,735
Beet Sugar Processors (Table 2)	1,472,720
Importers of Direct Consumption Sugar (Table 3)	676,153
Mainland Cane Mills for Direct Consumption (Table 4)	73,683
Total	6,321,806

The distribution of sugar for local consumption in the Territory of Hawaii for the first eleven months of 1940 was 29,073 tons and in Puerto Rico 62,983 tons (Table 5).

Stocks of sugar on hand November 30, 1940, and comparative figures for 1939, in short tons, raw value, were as follows:*

	1940	1939
Refiners' raw	369,722	416,664
Refiners' refined	333,886	377,703
Beet Sugar factories	1,282,789	1,326,342
Importers' direct-consumption sugar	56,188	100,242
Mainland Cane Factories	91,029	158,543
	2,133,614	2,379,494

* Not including raws for processing held by importers other than refiners, which amounted to 23,736 short tons, commercial value, in 1940 and 50,527 short tons, commercial value, in 1939.

These data were obtained in the administration of the Sugar Act of 1937. The statement of charges against the 1940 sugar quotas during January-November was made public on December 7.

SUGAR STATISTICAL REPORTS

Vol. 7 No. 11—January-November, 1940

TABLE 1
Raw Sugar: Refiners' stocks, receipts, meltings, and deliveries for direct consumption for January-November, 1940
(Short tons, raw value)

Source of Supply	Stocks on Jan. 1, 1940	Receipts	Meltings	Deliveries for direct consumption	Lost by fire, etc.	Stocks on Nov. 30, 1940
Cuba	250,845	1,504,411	1,629,564	2,878	190	122,624
Hawaii	46,212	924,815	941,507	1,564	6	27,950
Puerto Rico	37,187	602,273	552,040	268	0	87,152*
Philippines	17,902	863,416	801,633	117	2	79,566
Continental Raws	117,162	224,991	292,210	2,688	7	47,248
Virgin Islands	0	0	0	0	0	0
Other Countries	9,397	42,064	46,279	0	0	5,182*
Miscellaneous (Sweepings, etc.)	0	206	206	0	0	0
Total	478,705	4,162,176	4,263,439	7,515	205	369,722

* Includes sugar in customs' custody as follows: 50,956 tons from Puerto Rico and 5,182 tons from "other countries."

Compiled in the Sugar Division, from reports submitted by sugar refineries on Form SS-15-A.

TABLE 2
Stocks, Production, and Deliveries of Cane and Beet Sugar by United States Refiners and Processors January-November, 1940
(Short tons, raw value)

	Refineries[1]	Domestic Beet Factories
Initial stocks of refined, Jan. 1, 1940	355,600	1,351,886
Production	4,248,053	1,403,623
Deliveries	4,269,767[2]	1,472,720[3]
Final stocks of refined, Nov. 30, 1940	333,886	1,282,789

[1] The refineries' figures are converted to raw value by using the factor 1.061725, which is the ratio of meltings of raw sugar to refined sugar produced during the years 1938 and 1939.

[2] Deliveries include sugar delivered against sales for export. The Department of Commerce reports that exports of refined sugar amounted to 178,032 short tons, raw value, during the period January-November, 1940.

[3] Larger than actual deliveries by a small amount representing losses in transit, through reprocessing, etc.

Compiled by the Sugar Division, from reports submitted on Forms SS-16-A and SS-11-C by the sugar refineries and beet sugar factories.

TABLE 3
Stocks, receipts, and deliveries of direct-consumption sugar, from specified areas, January-November, 1940
(Short tons, raw value)

Source of Supply	Stocks on Jan. 1, 1940	Receipts	Deliveries or usage	Stocks on Nov. 30, 1940
Cuba	89,805	375,882	429,119	36,568*
Hawaii	138	8,842	8,978	2
Puerto Rico	11,313	173,659	183,030	1,942
Philippines	11,517	57,515	52,890	16,142
England	0	0	0	0
China and Hongkong	0	127	127	0
Other foreign areas	0	3,543	2,009	1,534
Total	112,773	619,568	676,153	56,188

* Includes 1,848 tons in customs' custody.

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Compiled in the Sugar Division from reports and information submitted by importers and distributors of direct-consumption sugar on Forms SS-15-B and SS-3.

TABLE 4
Mainland Cane Mills' Stocks, Production, and Deliveries, January-November, 1940
(Short tons, raw value)

Stocks on January 1, 1940	Production	Deliveries		Stocks on November 30, 1940
		For Direct Consumption	For further Processing	
160,816	255,960	73,683	252,064	91,029

TABLE 5
Distribution of Sugar for Local Consumption in the Territory of Hawaii and Puerto Rico, January-November, 1940
(Short tons, raw value)

Territory of Hawaii	29,073
Puerto Rico	62,983

Excerpt from Federal Register, January 1, 1941

G.S.Q.R. Series 7, No. 1, Rev. 2, Amendment 1
Revision of Prorations of the Quota for
Foreign Countries other than Cuba

Pursuant to the authority vested in the Secretary of Agriculture by the Sugar Act of 1937 (50 Stat. 903; 7 U.S.C., Supp. V, 1100), as amended, §821.24 of General Sugar Quota Regulations, Series 7, No. 1, Revision 2, issued September 18, 1940, is hereby amended to read as follows:

Proration of quota for foreign countries other than Cuba—(a) Revised prorations. The quota for foreign countries other than Cuba is hereby prorated, pursuant to section 202 and 204 (b) of said act, among such countries as follows:

Country	in Pounds Prorations
China and Hongkong	237,786
Dominican Republic	6,452,490
Haiti	891,640
Mexico	657,903
Peru	40,114,181
Other countries	0
Total	48,354,000

In testimony whereof, I have hereunto set my hand and caused the official seal of the Department of Agriculture to be affixed in the District of Columbia, city of Washington, this 30th day of December, 1940.

CLAUDE R. WICKARD,
Secretary of Agriculture.

1940-41 Sugar Allotments for Puerto Rican Growers Announced

(*Official Release*)

The Sugar Division of the Agricultural Adjustment Administration announced on December 3rd the basis for 1940-41 proportionate shares or allotments for sugarcane growers in Puerto Rico.

The 1940-41 proportionate shares for established growers will continue to be in terms of sugar, and will be determined by adjusting their 1939-40 proportionate shares to the consumption requirements for Puerto Rico and continental United States, plus normal reserves during the 1941 calendar year.

The 1940-41 proportionate shares for new growers are to be established in terms of acres. New growers will be considered to be those on land purchased or leased under the programs of the Puerto Rico Reconstruction Administration or the Farm Security Administration. Such growers may qualify for up to three acres of sugarcane for harvest in 1941.

The Sugar Act of 1937 provides, as one of the conditions for federal payments, that growers may not market in excess of their farm's proportionate share of the cane needed to enable the area in which the farm is located to fill its marketing quota and provide normal reserves.

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THE SUGAR BULLETIN

Entered to the second-class of mail matter April 13, 1925 at the post office at New Orleans, La., under Act of March 3, 1879

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 19 NEW ORLEANS, LA., FEBRUARY 15, 1941 No. 10

A Report to Our President

To President W. F. Giles,

Adeline, La.

(A report made to the Chief Executive of the American Sugar Cane League on February 10th, 1941, by Mr. Frank Barker, Retiring Chairman of the League's Legislative Committee).

As Chairman of the Legislative Committee of the American Sugar Cane League during the past Session of Congress and having served as a member of the Legislative Committee under Mr. C. D. Kemper and Col. W. F. Giles during the past ten years, I am presenting to you briefly a record of the League's work as it has come under the observation of my Committee, with particular reference to the results obtained that benefitted all classes of the League's membership. I will not burden you with too many details but will point out those instances of services rendered which come readily to mind from among hundreds of examples.

When the American Sugar Cane League was first organized in 1922, the chief fight was centered around the tariff. The League acted as the spearhead of a movement called for by cane growers and factory owners alike to get a higher tariff for the benefit of the whole domestic industry, so that the price of raw sugar would be increased, which of course meant that the price paid for sugarcane would be increased correspondingly. Our success in 1922 and in 1930 made it possible for the Louisiana sugar industry on both its farming and factory sides to continue to exist. I do not think that is too strong a statement.

When the mosaic disease had practically destroyed the production of sugar in Louisiana, the League was the single constructive force which cooperated with the U. S. Department of Agriculture and the Louisiana State Experiment Station in developing and distributing the P.O.J. and other new varieties of sugarcane. The scientists of the U. S. Department of Agriculture have repeatedly recognized this cooperation by the League as the most outstanding and effective assistance ever given by an industry organization in bringing to the farmers concerned the direct benefit of the results of federal experiments and research.

When the P.O.J. cane also began to succumb to disease and cane growing became once more threatened in Louisiana, the League provided buildings and test plots of farm land for the Federal and State scientists to develop additional varieties of seed cane. As proven seed became available, it was the League which distributed this seed to all of the growers of sugarcane in Louisiana, large and small, and whether they were members of the League or not. It is as a result of this constant flow of new seed that the Louisiana sugar industry has improved the production on all sugarcane farms from a low average of 755 lbs. of sugar per acre in 1926 to an average of 3,646 lbs. of sugar per acre in 1938, and finally a high average of 3,664 in 1939. These averages apply to all farms, from the smallest to the largest. The contributions made by the League as the representative organization of the industry have been distributed to and enjoyed by every sugarcane grower in Louisiana.

In addition to the above, when Dr. E. W. Brandes

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The American Cane Growers' Assn.
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secured permission from the Department of Agriculture to make a trip to the Soviet Socialist Republic of Uzbekistan, to secure what is now the famous wild cane which he is using for breeding purposes at the Arlington Farm, right outside of Washington, the League supplemented the Government appropriation with an amount of money which made it possible for Dr. Brandes to more efficiently secure the seeds and the wild cane for which he traveled at considerable risk to that part of Russia. After this wild cane had been bred in Peru where the arrows were sent by air in July, 1936, as well as in subsequent breedings where the full plants were sent by air to Peru, the resulting seed had to be tested for its ability to withstand the cold and for its other characteristics. The League, through Dr. Brandes, arranged to rent a large refrigeration unit at Arlington and to supply the monies necessary to operate the plant and to conduct the tests which would eliminate the seeds which could not satisfactorily pass the requirements. This was probably the most advanced type of seed testing that has ever been tried, and the results will inure to the benefit of the cane growers of Louisiana, whether small or large, and whether members of the League or not.

When the Louisiana State University faculty needed a modern test mill to conduct experiments to prove the value of each of the seed cane varieties and to demonstrate how to increase the amount of sugar recoverable per acre of cane land, the League helped to finance this project. According to the books of the League, which have been certified as correct by recognized public accountants, the total direct expenditures of the League for buildings and various equipment and land donated to the Federal Government and to State Agencies amount to $45,691.21 for the Federal Government and $27,208.00 for the State Agencies, making a total of $72,899.21 contributed by the League for the benefit of every grower of sugarcane in Louisiana.

When the sugar quota system was originally discussed in Washington, it was the representative of the League who made the first open declaration in favor of Government quotas made by any domestic area. At a hearing before the U. S. Tariff Commission in 1933 the representative of the League courageously took the lead in admitting publicly that the tariff was no longer effective on price because the Philippines and domestic islands whose sugar paid no tariff were nullifying the effect of the tariff. In the meetings held in 1933 for the purpose of preparing a Sugar Stabilization Agreement, the League represented the cane growers of Louisiana, and at the hearing before the House Committee on Agriculture in 1934, the representative of the League was the only domestic spokesman who came out openly in favor of a sugar quota system under Government supervision.

When the quota system was adopted, the basis of the quota for each area was the current production record. The League succeeded in securing a quota of 100% current production for the Louisiana and Florida area, even though each other domestic area took a severe cut. Thus, it is correct to state that it was the Louisiana cane growing industry, which the League had been the main factor in keeping alive through the terrible visitation of the mosaic disease, which furnished the exclusive basis upon which Louisiana cane growers were given any quota at all. If the Louisiana industry had been allowed to pass out completely, as most of it had almost done in 1926 when our production was a mere 47,000 tons of sugar for the whole State, then there would have been no basis for including Louisiana growers, large or small, in the quota program at all. Texas had produced sugarcane in the past and gone out, and Texas received no quota.

When federal policies were being determined and later when regulations were being prepared under the Sugar Act, the League sent a constant flow of committees to Washington during a period which began in 1933 and extended throughout 1934 and part of 1935. The cost of such representation was very great. A complete volume could be filled with the innumerable concessions and improvements which were obtained by these committees in the provisions of the production contract under which benefit payments were made by the Government to growers and in the clarification and favorable interpretation of the involved and numerous regulations. Let me mention only several outstanding examples:

(a) At one time the Sugar Section of the Depart-

ment of Agriculture had decided to pay Louisiana cane growers at the rate of $2.06 per ton of cane to reach parity. A League committee was sent to Washington, and when it was unable to secure a change from the Sugar Section, it carried its appeal to the higher officials of the Department and convinced them that Louisiana cane growers were entitled to a payment of $2.26 per ton in order to give to the cane growers full parity. That action alone meant over $600,000 of additional payments distributed to everyone of the 15,570 cane growers in Louisiana.

(b) On another occasion, when the quota for Louisiana was fixed by the U. S. Secretary of Agriculture so that it was restricting the production of sugarcane for everybody growing cane in this State, the League took the position that every grower should be allowed at least a minimum of 10 acres, because no small grower could have a successful farming operation in sugarcane on less than 10 acres. That position was exclusively for the benefit of the smallest growers and at the expense of the larger growers, but it was fair and good farming practice, and the League still maintains that position.

(c) Under the Sugar Act of 1934, the Louisiana quota was given to growers in terms of tons of sugarcane. If a grower exceeded that tonnage, he was penalized. The small growers were the greatest sufferers because they had little knowledge of the productivity of any seed cane and were least able to adjust their acreage to, or anticipate the effect of, changing conditions. The League made a vigorous fight, against the opposition of the Department of Agriculture, to have the quota expressed in terms of acres, so that each farmer would be told how many acres to plant and on whatever cane he produced from that acreage, he would receive a Government payment, without penalty. This change made in the Sugar Act of 1937 has resulted in great benefit to every individual grower in Louisiana and particularly to those operating on a modest scale.

(d) The type of service which the League is rendering to all growers is demonstrated by the recent changes in connection with abandonment and deficiency payments. The Sugar Act of 1937 provides for extra payments when cane is abandoned or when the yield of sugar per acre is deficient. But, the Secretary of Agriculture had established the normal yield to be the average yield of 1935 and 1936, which he had used as a basis for abandonment and deficiency payments. All Louisiana growers know that the 1935 and 1936 yields were quite low and that our improved yields in 1937, 1938, and 1939 are definitely representative of normal. For several years the League constantly agitated for bringing the basis of normal yield up to date. As long as the cane crop was good in Louisiana, the growers were indifferent to regulations about abandonment and deficiency, and the regulations remained unchanged. But the League rejected the axiom that "everybody's business is nobody's business" by making every grower's business the League's business. By persistence and constantly discussing the matter with County Agents, with the Baton Rouge A.A.A. Office, and with the Sugar Division, the League finally obtained favorable action just a short while before the disastrous freeze of November 15, 1940. At the present time, the regulations are that the normal yield is the average for 1937, 1938, and 1939, which will mean payments estimated at over $2,000,000, a proportionate share of which will go to every sugarcane grower in Louisiana, on the 1940 crop.

When the original quota of 260,000 tons for the Mainland Cane Area, composed of Louisiana and Florida, proved much too small to take care of our cane growers, the Department of Agriculture recognized the problem but refused to recommend any increase above 360,000 tons. The League carried its case direct to Congress in 1937, and through its representations secured a quota of 420,167 tons in the Sugar Act of 1937. All growers of sugarcane in Louisiana received the benefit of that increase in proportionate shares.

When the controversial matter of the contract by which cane is purchased from growers by processors came up for consideration under the Sugar Act, the League took the position that its membership being composed of growers and processors, there should be a Grower-Processor Committee organized with an equal number of growers and processors, each selected by their own group. The League encouraged and helped to finance the operations of the Grower-Processor Committee until it could secure its own funds and the Committee operated independently of the League and acted to arbitrate and compose all matters in dispute for the common good. The League refused to participate in these negotiations and discussions and took no position in any controversy between growers and processors. The Grower-Processor Committee brought about changes in the contract which were in the majority of cases for the benefit and advantage of the cane growers.

I am pleased to furnish you with this information because I know that you are interested in the picture that has passed before the eyes of the League's Legislative Committee during the term of my Chairmanship and also because I feel that you will agree that in representing the cane growers of Louisiana, large and small, the League has a record of action and accomplishment in which all Louisiana growers have participated proportionately and fairly.

I would like to mention that when the going was toughest for the Louisiana cane growers, the membership of the League in 1922 was 100, and in 1928 was 2,764. The present paid up membership is 9,671, which we can humbly accept as direct evidence of satisfactory services rendered to and appreciated by the Louisiana cane growers as a whole.

In terminating my period of service as Chairman of the Legislative Committee of the League I want to say that I am able to look back over the work of my Committee with the feeling that in all of its acts, and in making its many difficult and important decisions as to policy, it has always had in mind the right of every member of the League, regardless of the extent, or the nature, of his participation in our industry, to demand and receive full and fair consideration of his interests. It is my hope that this will be generally recognized. If it is, that will be considered by me as being the greatest possible reward that could come to me as Chairman. Respectfully,

FRANK L. BARKER.

The Mosaic Disease and Co. 281

Suggested "Service Work"

(Extract from a Report to the Contact Committee of the American Sugar Cane League).

C. W. Edgerton, Plant Pathologist, Louisiana Agricultural Experiment Station.

For many years the Department of Plant Pathology of the Louisiana State Experiment Station has been studying the various commercial varieties of cane and the promising new seedlings, and testing their resistance to the various cane diseases, especially mosaic, red rot, and root rot. Information concerning resistance and susceptibility to disease is very necessary at the time when a decision is to be made in regard to the release of a new variety or when recommendations are to be made regarding the further planting or the abandonment of an old variety.

The main purpose of this work, of course, is to try to have available at all times satisfactory varieties which are resistant or at least tolerant to the various diseases of major importance. Unfortunately varieties which meet all of these requirements are not easily secured. While all the varieties which are now being grown in Louisiana have many very desirable characteristics, no one is entirely satisfactory.

From a disease standpoint some varieties show too great a susceptibility to the red rot and some to the mosaic disease. The variety C.P. 28/19 is apparently becoming more and more susceptible to the red rot. While it undoubtedly will still be grown commercially for a number of years, it definitely has a weakness which is very undesirable and which may eventually destroy its value as a commercial cane.

The two very valuable Coimbatore canes, Co. 281 and Co. 290, are very susceptible to the mosaic disease and the reductions in yield due to this disease are very serious. This is especially true of Co. 281 which is the more susceptible of the two. The mosaic in Co. 281 is at present a very serious problem.

That mosaic causes a very severe loss in Louisiana to such varieties as Co. 281 and Co. 290 is shown by the results of field tests which have been conducted at the Sugar Station, Baton Rouge, during the past eight years. Replicated plots have been planted with mosaic-infected and mosaic-free seed cane. The reductions in yield due to mosaic have varied somewhat from year to year, but on an average have been about 10% for Co. 281 and slightly more for Co. 290. The reductions in yield are shown in table 1.

Table 1. Reduction in yield (per cent) in plant cane caused by mosaic.

Variety	1933	1934	1935	1937	1938	1939	1940
Co. 290		0.8	16.5	29.7	6.1	21.3	9.7
Co. 281	0.8	9.2	6.1	8.9	6.7	18.4	10.9

Co. 281 is generally considered at best a low tonnage variety. If the normal yield is reduced 10% by the mosaic disease, the margin of profit must be reduced to near the minimum.

The mosaic disease also spreads extremely rapidly in the variety Co. 281 and this makes the control difficult and complicated. That the mosaic spreads much faster in Co. 281 than in the other commercial varieties is shown by results secured at the Sugar Station at Baton Rouge in 1940. On July 24, the percentage of mosaic was obtained in all the plots planted with mosaic-infected and mosaic-free seed cane. The percentage of the disease on that date is shown in table 2.

Table 2. Percentage of mosaic-infected plants on July 24, 1940, in plots planted with mosaic-free and mosaic-infected seed cane.

Variety	Plots planted with mosaic-free seed cane	Plots planted with mosaic-infected seed cane
Co. 290	3.6	99.0
Co. 281	15.7	100.0
C.P. 28/11	7.5	99.7
C.P. 28/19	4.1	93.1
C.P. 29/320 ..	0.2	68.4

The rapid increase of mosaic in Co. 281 in 1940 as shown in the table is comparable to results obtained in preceding years.

It is very essential at this time to consider what can be done and what should be done to save the variety Co. 281. This is a very valuable cane but it is definitely being injured very seriously by the mosaic disease. It is questionable whether this variety can be grown profitably under the present conditions in Louisiana while the percentage of mosaic is around 100% in the fields. It has been the hope of the planters and the technical workers that a suitable variety, resistant to mosaic, would be found which could be substituted for Co. 281. Unfortunately no such variety is at present available and apparently there is none in sight for the near future. A variety such as Co. 281 is very necessary in Louisiana. It seems probable that this variety will have to be grown in certain sections of Louisiana for at least a number of years. At one time many of the planters were abandoning Co. 281 but now it seems that they are coming back to it.

If Co. 281 still is to be grown in the State for some time, as seems probable, would it not be wise to pay some attention to the control of the mosaic disease? The only control measure which seems practical is to use disease-free cane for planting purposes. Disease-free seed stock can only be obtained by a systematic and thorough roguing of fields from which seed cane is to be obtained.

Previous work at the Experiment Station has shown that it may be possible to "clean up" some seed stock in certain areas in the State. Unfortunately this work was discontinued but it may not be too late to attempt to improve Co. 281 by producing seed stock reasonably free of the mosaic disease.

Recommendations regarding the roguing of Co. 281 have been made in the past but it has always been thought that this is too difficult and too complicated for most of the plantations with the help that is available. Certain plantations have made some headway but it is very questionable whether it is worth while for most of the plantations to undertake such work.

It seems probable that work of this kind should be "service work" carried on by some department that has men with the technical knowledge and time and money to do the work properly. If work of this type is not carried on properly, it would be better not to carry it on at all.

At this time it is suggested that the American Sugar Cane League consider seriously the problem of improving the variety Co. 281 and attempt to make available seed stock reasonably free of the mosaic disease. This is a serious and difficult problem and must

be in the hands of someone who can go ahead by himself with a minimum of supervision. It is possible that the man who has charge of the "hot water treatment" work in the Experiment Station, if he is provided with sufficient help, could supervise this work. If such work is undertaken more assistance with a somewhat larger appropriation would have to be made for next year. If the work is to succeed, eventually there must be certain fields maintained relatively free of the mosaic from which the planters can purchase seed cane. That there is a demand for such seed has been made clear by requests which have been made to the Sugar Station.

The work need not be confined to the variety Co. 281, but could include others such as C.P. 28/11, C. P. 28/19, and Co. 290. However, the problem at present with these other varieties as compared to that with Co. 281 is comparatively simple.

The problem comes down to this:

1. It is apparent that the Louisiana planters must continue to grow Co. 281 for at least an indefinite period.

2. The mosaic spreads extremely rapidly in Co. 281 and causes too great a loss.

3. It is not possible to grow Co. 281 and the mosaic disease at the same time and get by with it.

4. Should an attempt be made to clean up certain areas, so that seed cane comparatively free of the disease can be obtained by the planters? If so, how should this work be carried on and how can it be financed?

Reginald Dykers Presented Card By Sugar League

Life Membership Is Given Founder and Manager Emeritus of Cane Group.

(*From Times-Picayune January* 30, 1941).

Culminating more than a half century of service to the sugar industry of the state, Reginald Dykers, founder and manager emeritus of the American Sugar Cane League, was presented a life membership card in the league at a meeting of the executive committee Wednesday at League headquarters, 407 Carondelet Street.

The membership card was of heavy gold and on it was engraved: "Because of distinguished service rendered the sugarcane industry of the United States." The presentation was made by W. F. Giles, president of the League.

In making the presentation Mr. Giles paid tribute to Mr. Dykers' 52 years of service to the sugar industry. Only two persons, David W. Pipes and C. D. Kemper, have received similar tokens, he pointed out.

Mr. Dykers first became connected with the sugar industry in 1889, serving as secretary to the Louisiana Sugar Planters' Association, an organization which preceded the present League. In 1922 he organized the League, inviting other sugar organizations to join. For 17 years he served as manager of the League, until his retirement in 1939.

The sugar industry, he believes, has changed a great deal during the past half century.

"It has become more of a corporate affair," he said. "When I first became connected with the industry the plants and factories were owned mostly by individuals and families. Now they are incorporated and have stockholders. The number of sugar houses and factories has also been greatly reduced. In 1889 there were 746 sugar factories in the state. Today there are about 75. This means the factories nowadays are larger and that everyone owning a plot of land in the country does not decide to have a little sugar house."

Mr. Dykers, who resides at 8320 Sycamore street, still goes down to the League office to give advice when needed.

Executive Committee Meets

The regular monthly meeting of the Executive Committee of the American Sugar Cane League was held January 29, 1941, at the office of the League in New Orleans. There were present: Messrs. W. F. Giles, President, presiding; John J. Shaffer, Jr., Marcel J. Voorhies, Frank L. Barker, J. P. Duhe, Edward J. Gay, E. N. Kearny, Leon J. Landry. George M. Murrell, Charles A. O'Brien, Louis Robichaux, Dubourg Thibaut, Louis J. Wilbert, and Reginald Dykers, members of the Committee. Present also were Messrs: Walter A. Sullivan, L. G. Ebeling and T. M. Barker.

President Giles made the following announcement: "Some time ago the League voted a life membership to Mr. Reginald Dykers for his long and valuable services to the League—services that cannot be calculated in terms of money. Several of you here have worked with him for many more years than I have. Your relationships, I understand, have always been pleasant. In compliance with the resolution I have just referred to, adopted on June 28, 1939, I now present to Mr. Dykers a gold card certifying to his life membership in the League."

On receiving the card Mr. Dykers commented, "I want to say to all of you how much I appreciate this gold life-membership card and how much it will always be cherished, not only by myself, but by the members of my family."

The matter of the co-operative agreement with the Bureau of Plant Industry comprising studies of the effect of low temperatures upon the vitality and germination of buds (Dr. Brandes' refrigeration experiments) was discussed, and the Committee decided that the League should continue its co-operation in that most important work.

Sugar Consumption Quotas for Hawaii and Puerto Rico Announced

(*Official Release*)

The Sugar Division of the Agricultural Adjustment Administration announced January 16th that the initial local consumption quotas for 1941 in Hawaii and Puerto Rico, established under the provisions of the Sugar Act of 1937, are 30.410 and 69.052 short tons, raw value, respectively. The initial 1940 quotas were: Hawaii, 30.869 tons; Puerto Rico, 70,784 tons.

These local consumption quotas are in addition to the Hawaiian and Puerto Rican quotas for delivery in continental United States during the current year.

Committee Activities

A meeting of the Contact Committee of the American Sugar Cane League was held at Baton Rouge, Louisiana, on January 24, 1941. Those present were:

Contact Committee—Stephen C. Munson, E. A. Maier, B. Thibaut, Geo. L. Billeaud, Chas. A. O'Brien, M. J. Kahoe, Jr., Elliot Jones, F. A. Graugnard, Jr.

Houma Experiment Station—Leo. P. Hebert, George Arceneaux, E. Gregson Brown, Eaton M. Summers, E. K. Bynum, E. V. Abbott.

Experiment Station Staff—C. T. Dowell, W. G. Taggart, E. C. Simon, C. B. Gouaux, C. W. Edgerton, B. D. Gibbens, I. L. Forbes, A. L. Dugas, R. A. Ballinger, J. N. Efferson, Harold T. Barr, L. V. George, R. M. Grigsby, R. T. Gibbens, Jr.

Extension Division—F. A. Swann, C. C. Couvillion, Al. Moreau, A. B. Curet, E. S. Landry, L. J. Peltier, J. J. Froisy.

Visitors—L. C. Bourgeois, Jr., W. C. Morrison, John J. Shaffer, Jr., B. C. Thomson, M. L. Shaffer, Sam J. Begue, S. A. Thornton, Lewis N. Flint, Lyman E. Thornton, C. J. Arceneaux, A. J. Adams, Ivan M. Wilbert, John A. Wilbert, F. B. Roubique, S. J. P. Chilton, E. W. McNeil, W. C. Morrison, Jr., D. J. Senette, Kerny Robicheaux, E. J. Badeaux, A. L. Faucheux, E. P. Munson, A. J. Landry, P. E. Lasseigne, E. K. Ventre, J. Dufrenoy, S. S. Pearce.

A report was given to the Contact Committee by Mr. R. T. Gibbens, Jr., on the outfield tests which have been made to determine the effect of the hot water treatment of seed cane. Mr. Gibbens explained that the purpose of the investigation is to determine the effect on stands and yields of cane and sugar per acre resulting from the application of the customary hot water treatment of seed cane for controlling chlorotic streak disease as applying to different varieties, different dates of planting, and different soil types as found in the different localities in the Louisiana sugar-cane district. He explained that the report was a preliminary one which gave the results to date, and that no definite statement could be made yet as to what could be considered the best date of planting for the hot water treated cane. He pointed out that germination was increased by the treatment, according to the records on the work which had been done, and that the tests would be continued to determine the full effect of the treatment.

A general report was then given by Dr. C. W. Edgerton which included the following:

"1. The results of field tests conducted at Baton Rouge during the past year to determine the response of the various commercial varieties and promising seedlings to the important cane diseases.

"2. Results and discussion of hot water treatment tests.

"3. Discussions and recommendations regarding work for the coming year."

Dr. Abbott gave a short discussion of the work with Florida seedlings which is being carried on at the Houma station. He stated that the seedlings tested were high in sucrose but low in tonnage, and for that reason had not been tested more extensively.

Mr. Taggart pointed out that the pests which we now have in Louisiana, such as mosaic and red rot, were brought in by cane imported from other sources without being brought in through Federal Quarantine, and he urged that no cane be brought into Louisiana except through quarantine since the chance of keeping out pests is greater if the machinery which has been set up for our protection is backed up. He stated that bringing in cane through quarantine was a slow method but that it was safe. He suggested that if the planters found that method too slow they should let the Station know about it and make any suggestions which they cared to make as to how the procedure could be improved. He stated further that the Station would always be willing to cooperate and to take whatever steps within reason they could to improve the situation.

Dr. Ballinger gave a preliminary trial balance sheet on cost studies of sugar mills and large plantations. He showed that there was an increase in net income for both the mills and the plantations, but that this might be due in part to the higher price of sugar in 1939. It was decided that his report in final form would be given at a later meeting.

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Louisiana Sugar Industry Offers its Plant Facilities to the National Defense Council

On Tuesday, February 4th, the American Sugar Cane League called a meeting of the Louisiana sugar processors at Thibodaux, La. The main purpose of the meeting was to discuss the production and delivery statistics for the mainland sugar area and to consider the marketing allotments for 1941, for which a Federal hearing has been called for February 14th and 15th on the University Campus at Baton Rouge.

At this meeting Mr. Wallace Kemper, of Franklin, La., a member of the National Defense Council of the State of Louisiana, and Mr. J. J. Munson, of Houma, La., Chairman of the Industrial Committee of the American Sugar Cane League, discussed with the group the various suggestions made to make available to the National Defense Council the facilities of the Louisiana sugar processors.

After much favorable discussion it was unanimously agreed by the processors assembled that the facilities of the Louisiana sugar factories should be offered to the National Defense Council for whatever purpose they would best contribute to the National Defense Program.

The General Manager of the American Sugar Cane League was authorized to forward the following telegram:

February 5, 1941.

Mr. W. C. Kemper,
c/o Governor Jones' Office,
State Capitol,
Baton Rouge, La.

The representatives of the Louisiana sugar factories by unanimous vote do hereby offer to the Federal Government through the National Defense Council of the State of Louisiana all of the facilities of their sugar factories for the purpose of assisting their government in the national emergency which exists at this time.

American Sugar Cane League.

Compliment

We are pleased to acknowledge the following compliment received by Mr. C. J. Bourg, Washington representative of the American Sugar Cane League, from Mr. W. J. Gorst, beet grower of Worland, Wyo., who is the 2nd Vice President and Acting Secretary-Treasurer of the National Beet Growers Association: "I have today a copy of *Sugar Bulletin* of Jan. 15 and congratulate you on your showing of 9671 members of American Sugar Cane League out of some 11,255 producers of cane."

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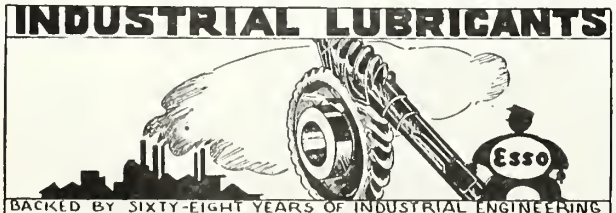

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We stand for the encouragement of Home Industries as against Foreign Competition

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Sugar Becomes Live Topic

(By C. J. Bourg)

National defense and the Lease-Lend Bill have been monopolizing most of the thought and discussions in Congressional circles for several weeks; consequently, there has been little attention given to other matters. But sugar is becoming an increasingly live subject because of its intimate connection with national defense, consumer supplies, insular policies, and the prospect of sugar legislation in 1941. There are four matters concerning sugar which are presently compelling the attention of friends of the domestic sugar industry: the soaring ocean freight rates which, with the scarcity of cargo vessels, are jeopardizing imports of sugar from offshore islands, especially the Philippines; the proposed loan to Cuba by the United States Export-Import Bank; the reduction of beet acreage for 1941; and the Report of the Secretary of Agriculture for 1940.

Ocean Freight Rates and Boat Scarcity

The gravity of the general war situation has caused most of our citizens to overlook some of the developments with respect to sugar. For instance, a very significant dispatch was the one from Manila, which reads as follows:

"MANILA (AP)—A movement to get the United States to permit Army transports to carry sugar to the United States, as in World War days, has been started in an effort to alleviate the shortage of merchant ships due to war conditions.

"A joint committee of Philippine sugar planters and millers took the action. Possibility of having the Government create a merchant marine fleet to handle 50 per cent of Philippine exports also was discussed."

The Philippine freight situation is precarious! According to Lamborn & Co. of New York, the normal sugar rate is 30c per hundred pounds, which is $6.75 per long ton. This rate has been gradually increased until the latest information on the subject is that $25.00 per ton is being asked to freight sugar from the Philippines. There are Japanese boats available, but the insurance companies are no longer willing to insure the cargo of any Japanese boat against American or British seizure. The possibility of war also brings the possibility of sinking. A Japanese steamship firm was forced recently to purchase sugars in the Philippines and take delivery there, before their boats could be loaded.

Another influence is that practically all ships in the Pacific trade are being used to move tin, rubber, ores, and other commodities from the Dutch East Indies and India. Some of the boats have been chartered for a movement from Australia of 125,000 tons of wool, which are to be stored in the United States during the first six months of 1941. So much for the Pacific!

The freight situation with regard to Cuban sugar is not a whole lot better as far as rates go. The normal rate is 12c to 14c, but the asking rate for March is 30c and bids fair to rise higher. The steamship lines are hesitant about making commitments for future cargos on account of the uncertainties of war conditions.

No wonder we have seen press dispatches in the newspapers during the past week reminding the public how the Cubans made the American consumers pay 25c and 30c for sugar immediately following the last World War.

Export-Import Bank Loan to Cuba

In January of each year the Cuban Government decides the amount of sugar production to be allowed. The preliminary estimate of production needed for

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available markets in 1941 was set at just under 2,000,000 tons. The United States Export-Import Bank has been negotiating a loan which would permit increasing the production of Cuban sugar by something more than 400,000 tons. As there is no market for this sugar, the first offer by the U. S. Export-Import Bank of a loan of $1.00 per 100 lbs. was rejected because the Cubans frankly stated that it cost them $1.40 to produce the sugar. The negotiations were dropped, and the Cuban Government entered the picture so that the reports now are that the amount of the loan will be $1.23 per 100 lbs. (which is nearer to average cost) amounting to approximately $11,000,000. A look at the market quotations today shows that the world price of raw sugar is 70c per hundred pounds. Therefore, a loan on the basis of $1.23 is, in fact, a purchase of Cuban sugar at cost of production with the privilege to the borrower to sell at higher prices if he can get them. Otherwise, the United States will have financed and practically bought 400,000 tons of Cuban sugar, supposedly to give employment in Cuba and to create a reserve against sugar demands from the United States and possibly from abroad.

1941 Reduction in Beet Acreage

The above proposition might be explained satisfactorily as part of the Good Neighbor Policy and Hemisphere Defense Program, but sugar beet growers of the United States have not missed the striking coincidence that on January 23rd, the Secretary of Agriculture announced a reduction of 17% in the acreage to be planted in the United States beet area for the 1941 crop. This means a reduction of something more than 300,000 tons of beet sugar. No one can fail to notice that, while one hand of the United States Government finances the production of 400,000 tons of Cuban sugar for which there is no market, the other hand of the United States Government reduces the production of a domestic area which has a United States market three times greater than its production. Stated another way, admitting that there is a surplus of beet sugar, if there is need for a reserve of sugar for defense purposes, then why not maintain that reserve in domestic mainland sugar which finances itself, rather than have the U. S. Government finance the production of an additional 400,000 tons of foreign sugar?

It is evident that the New York bankers are trying to take full advantage of the public sentiment about the emergency in national-defense and hemisphere-unity, to exploit more fully their investments in Cuba. They are joining with the free-traders, the internationalists, and the Pan Americans, under the guise of being a Good Neighbor to Cuba, although darn few native Cubans will get any benefits, and as usual the sugar growers of the United States will be called upon to pay, to sacrifice, and to accept the regimentation. But, will they?

For several years the cane growers of Louisiana have suffered under the distressing experience of acreage cuts and reductions. Our perennial appeals for relief have been practically crying in the wilderness because the other domestic areas were being allowed to plant almost at will. The increased production in the beet area over the production of 1934, 1935, and 1936 is proof of the almost unlimited production in the beet area. But, for 1941, the beet growers are now better able to appreciate that the demands and the complaints from Louisiana were based upon conditions which justified the appeals for increased quotas and less regimentation. For the first time in six years, both the domestic beet area and the mainland cane area have common problems and need increased quotas to permit of moderate expansion. At the very least there should be a better understanding among continental growers and a unity of interest with respect to amendments to the Sugar Act.

Report of the Secretary of Agriculture—1940

There is a chapter dealing with the sugar program in the annual Report of the Secretary of Agriculture. This chapter was discussed in the House a few days ago, and attention was invited to several statements by the Secretary which we can refer to only briefly. The Secretary stated that the income of the domestic sugar industry has been maintained at "approximate parity levels." Most farmers think of parity in terms of the price received for their products. Congressman Sanders of Louisiana made the following statement in that regard:

"Now, to get down to the farmer himself, I find that the parity price of sugarcane is today $4.76 per ton. Under the Jones-Costigan sugar program, the sugarcane growers received parity in 1934 and in 1935. But in 1936 they received about 80 per cent of parity, and 1937 and succeeding years they have

received lower and decreasing percentages of parity. The 1940 figures are not yet available, but I estimate on the basis of the average raw-sugar price, which forms the basis for payments for sugarcane, that the sugarcane growers in Louisiana will not receive more than $3.60 per ton of cane (including 96 cents per ton Government payment, provided by the Sugar Act), and $3.60 is just about 75 per cent of parity."

Continuing he declared:

"I cannot but express surprise and regret that our Secretary of Agriculture, when reviewing the sugar program, presents most of his arguments for the benefit of Cuba. A reading of his report shows he argues for Cuba in several instances and his only recommendation of an amendment to the Sugar Act is for the benefit of Cuba. But, as far as I can understand his amendment, the change in the Sugar Act would not rectify the situation about which he is apparently concerned, but it would do the trick of obtaining from Congress an approval of a change to be made in the reciprocal trade agreement to the extent that the reduction in the tariff on Cuban sugar would not continue if the quota restrictions were suspended, or expired. By amending the Sugar Act as recommended by the Secretary, Congress would give approval and share the blame of giving Cuba a tariff preferential of more than 50 per cent, regardless of the elimination of quota restrictions or the rights of sugar growers.

"The Secretary refers sympathetically to the fact that Cuba, in 1940, had a quota less than any year since 1933, but the Secretary does not state that it was from this low import situation of 1933 that Cuba was saved by the Sugar Act, so that she has participated in the American market at a much higher level and in a much greater proportion than could have possibly been the case if there had been no sugar program enacted and the tariff on Cuban sugar had remained at 2 cents. There is no question but that Cuba has been the chief beneficiary of the United States sugar program, and to seek to give Cuba additional advantages, while refusing to permit United States farmers to enjoy moderate expansion in production, is not consistent with the farm policies applied to all farmers, excepting those who produce sugarcane and sugar beets. * * *

"I consider the expression used by the Secretary as extremely unfortunate, when he says that in 1939 there were 'excessive marketings of domestic sugar.' To my way of thinking, there can be no such thing as an excessive marketing of an American product in American commerce.

"I note that the Secretary admits that there is regimentation under the sugar program. We have complained about this regimentation, and apparently our farmers were correct. But I must protest that the Secretary is engaging in wishful thinking when he speaks of the 'acceptance by the industry of the considerable measure of regimentation involved in the sugar program.' The best evidence that the regimentation has not been accepted was presented in the voluminous testimony by growers and producers from the several domestic areas last April 10, 11, and 12, at the hearing before the House Committee on Agriculture. There are 302 pages of testimony, most of which are devoted to a recitation of the amendments to the act and changes in the sugar program, which are desired in order to do away with unnecessary regimentation."

The following debate in the House indicates the thinking of Congressmen from different sections of the United States:

Mr. Pace of Georgia:

"There is no sugar in my section but I so thoroughly agree with the principles being enunciated by the gentleman that I want to ask him this general question. Can the gentleman think of any greater potential market in the world today than that of the American farmer if they are given the purchasing power?"

Mr. Sanders:

"The gentleman is absolutely right.

"To go back to your sugar proposition, the American sugar farmer today is only getting 75-per cent parity, which is a very slender purchasing power to keep the wheels of commerce and industry grinding, and the currents of trade flowing, and if that is depreciated beyond the present point, a very dangerous situation must be precipitated just along the lines of what the gentleman has in mind, because if the farmer cannot buy, industry cannot sell, and then you have stagnation."

Mr. Clevenger of Ohio:

"Would the gentleman state how he feels toward this proposed loan to Cuba to buy and store some four or five hundred thousand tons of sugar produced in excess of the normal market outlook for Cuban sugar and a reduction of acreage of some 17 or 18 per cent with respect to domestic sugar throughout the beet and cane area of continental United States?"

Mr. Sanders:

"I would rather not express myself on that very important subject at this time."

Mr. Clevenger:

"As the gentleman can well imagine, in my district, for instance, where beet-sugar production is largely a matter of the individual farms, it is of paramount interest to these men not to lose that 17½ per cent of their acreage, especially when last year they were cut with respect to corn, and the year before that with respect to hogs."

Mr. Sanders:

"It is absolutely essential that increased quotas be given the farmers of the continental United States."

Mr. Allen of Louisiana:

"In connection with the gentleman's very timely remarks on the sugar question, it is well to bear in mind that we had to pay Cuba during our great stress in 1917-1919 more than 30 cents a pound for sugar."

Mr. Sanders:

"The gentleman is correct."

Mr. Coffee of Nebraska:

"The gentleman has been making a very interesting statement in reference to this sugar matter, and I would like to call attention to the fact that on February 7 I introduced a bill that would reduce the Cuban quota of refined sugar 200,000 tons, allocating that to the continental areas; and another section of the bill provides that in the event the Secretary finds that the Philippines will not be able to market their quota of sugar, that that may be allocated to the domestic areas. I may point out that the present law provides that in the event the Philippines are not able to market their quota, that deficit is to be allocated to foreign countries. In view of the present situation in the Orient and the shortage of shipping from the Philippines, it is quite appar-

ent that the Philippines may be unable to market their quota guaranteed to them under the Philippine Independence Act, and as a consequence something of this kind should be done."

Mr. Sanders:

"I wish to say that it is essential, in view of the economic situation in continental United States, that increased purchasing power be put in the hands of the American farmer, and the recognition of the fact is contained in the democratic platform in the agricultural plank. I was a member of the platform committee in Chicago at the Democratic convention and aided in drawing the agricultural plank. I was not on the subcommittee, but I did participate in the conference in the committee as a whole, when the plank was rephrased, and I call attention to the fact that this plank recognizing the very fact that we have just been speaking of, that of the necessity of keeping the purchasing power in the American farmer, contains these pledges: First, to make parity as well as soil-conservation payments until such time as the goal of parity income for agriculture is realized; second, to continue to provide for adjustment of production through democratic processes to the extent that excess surpluses are capable of control; third, to safeguard the farmer's foreign markets and expand his domestic market for all domestic crops.

"Mr. Chairman, that phraseology is explicit. It means what it says, because I was a member of the Democratic platform committee, and it was intended to include the sugar farmers as well as the other farmers of the United States, and in view of world conditions and the slender purchasing power of the farmers of this country, it is imperative that this pledge be made effective in the operation of the Department of Agriculture and in the legislation that is to be enacted by this Congress."

Mr. Rich of Pennsylvania:

"I am in sympathy with the gentleman in the sugar industry in Florida and Louisiana, and the beet-sugar people in Michigan and Colorado. I think the American markets ought to be for the American people who want to farm and raise these commodities. However, the only way you will do that is by putting a tariff on all commodities to protect the American manufacturer, the American farmer, and the American laborer, and when you do that, and put that in the planks of the Democratic platform and carry them out, then we will help the American laborer and the sugar industry and the manufacturers in this country, and when you do that you will go to town with the American people."

Mr. Sanders:

"Mr. Chairman, I do not agree with the gentleman at all. Our people are thoroughly satisfied with the quota system as it applies to the 'offshore' areas."

Mr. Rich:

"Then what is the gentleman kicking about?"

Mr. Sanders:

"We are objecting to a statement in which the Department of Agriculture seems to indicate an intention to recommend the enactment of legislation that in our opinion would be harmful to the farmers of the continental United States."

Mr. O'Connor of Montana:

"I want to approve what the gentleman has said with reference to the Democratic platform.

"I feel that the allotments for the sugar-beet acreage in my State of Montana that has been made for the year 1941 are absolutely a repudiation and in direct conflict to the Democratic platform adopted at Chicago, and I think the Congress ought to do something about it."

Mr. Sanders:

"The pledge of the Democratic platform in Chicago was increased quotas for American farmers for domestic crops."

Mr. O'Connor:

"It has not been done?"

Mr. Sanders:

"No."

Mr. O'Connor:

"Instead of that the quotas have been decreased more than a year ago."

Mr. Sanders:

"That is what I object to."

Mr. Coffee of Nebraska:

"In connection with the question asked by the gentleman from Pennsylvania (Mr. Rich) about the tariff, a tariff alone will not prevent sugar coming into the United States in demoralizing quantities, because a tariff is effective only as against foreign countries, and if we lift the quotas sugar will come in from our offshore territories."

Public Hearing on 1941 Allotment of Maintained Cane Sugar Quota

On January 31, 1941, the Sugar Division of the United States Department of Agriculture announced a public hearing, (to receive evidence to enable the Secretary of Agriculture to allot the 1941 sugar marketing quotas among processors in the mainland sugar cane area, comprising Louisiana and Florida). The hearing to open February 14, 1941, in the Agricultural Extension Auditorium, Extension Building, University of Louisiana, at Baton Rouge. The hearing to start at 1:30 P. M.

On February 5, 1941, the American Sugar Cane League called a meeting of all Louisiana processors at Thibodaux to consider the production and delivery figures available and to discuss the position of the Louisiana sugar industry with respect to allotment of marketing allotments for 1941. The meeting expressed itself unanimously opposed to the use of the production of 1940 to represent the production end of the formula used by the Government. The following committee was appointed to present the case of the Louisiana industry at the hearing at Baton Rouge: R. M. Murphy, Chairman, J. J. Munson, R. H. Chadwick, Frank L. Barker, with Paul G. Borron, Jr. and Marcel J. Voorhies assisting the committee.

Following several meetings of the committee, a second meeting of the Louisiana processors was called at Baton Rouge, for the morning of February 14, 1941. At this meeting the Louisiana processors unanimously endorsed the presentation proposed by the committee and only one witness, namely R. M. Murphy, Chairman of the committee, appeared for the Louisiana processors and after going into details with respect to the situation today, he offered the following formulae:

First, "establish for each processor a marketing base derived from two components, namely: 'Past marketings' and 'Processings from proportionate share sugar cane', giving 1/4 weight to past marketings and 3/4ths weight to processings from proportionate share sugar cane. As to each processor

determine that part of the marketing base which is derived from past marketings by the use of the most favorable of any one of the following three options:

"A. 100% of the average quantity of sugar marketed during any three of the calendar years, 1937, 1938, 1939 and 1940.

"B. 80% of the average quantity of sugar marketed during any two of the calendar years, 1937, 1938, 1939 and 1940, or

"C. 70% of the average quantity of sugar marketed during any one of the calendar years 1937, 1938, 1939 and 1940.

"As to each processor determine that part of the marketing base which is derived from processings of proportionate share sugar cane by the use of the average of the processings from proportionate shares sugar cane for the two highest of the three crops, 1938-39, 1939-40 and 1940-41.

"After establishing the marketing base of each processor in the foregoing manner, marketing allotments for the calendar year 1941 are established by adjusting the total of all of the marketing bases to the 1941 quota for the mainland cane sugar area.

"In connection with this formula, I should like to offer in the record of this hearing a statement dated February 12, 1941, disclosing the marketing allotment which will be given each processor if this formula is made the Secretary's determination.

"The second formula which I have been authorized to propose is the following:

"Establish for each processor a marketing base derived from two components, namely: 'Past marketings' and 'Processings from proportionate share sugar cane', giving 1/4 weight to past marketings and 3/4th weight to processings from proportionate share sugar cane. As to each processor determine that part of the marketing base which is derived from past marketings by the use of the most favorable of any one of the following three options:

"A. 100% of the average quantity of sugar marketed during any three of the calendar years 1937, 1938, 1939 and 1940.

"B. 80% of the average quantity of sugar marketed during any two of the calendar years, 1937, 1938, 1939 and 1940, or,

"C. 70% of the average quantity of sugar marketed during any one of the calendar years 1937, 1938, 1939 and 1940.

"As to each processor determine that part of the marketing base which is derived from processings of proportionate share sugarcane by the use of the processings or estimated processings from proportionate shares sugar cane from the crop year, a major portion of the processings of which are available for marketing during the current calendar year. This means that as to the two processors operating in the State of Florida there would be used the estimated processings of the 1940-41 crop, as a major portion of the processings of this crop are available to them for marketing in 1941. As to the remaining processors in the area, all operating in the State of Louisiana, there would be used the estimated processings of the 1941-1942 crop, as a major portion of the processings of this crop are available to them for marketing in 1941.

"The Department of Agriculture has estimated the production or processings from proportionate shares of the two Florida processors for the crop year 1940-41, which figures have been placed in the record of this hearing. They are as follows:

Fellsmere Sugar Producing Company..... 5,452 tons
United States Sugar Corporation.....81,289 tons

"It is then necessary to estimate the production of processings from proportionate shares of the Louisiana processors from the crop year 1941-42. The Department of Agriculture has estimated that from its 1941-42 crop the mainland cane sugar area will produce from approximately 300,000 proportionate share acres 526,200 tons of sugar. We estimate, and it is reasonable to do so, that of the 526,200 tons, the Florida processors will produce the same quantity of sugar from proportionate shares in 1941-42 as in 1940-41, or an aggregate of 86,741 tons. We further estimate that the remainder of the 526,200 tons, or 439,459 tons, will be produced by the Louisiana processors. In order to estimate what part of the 439,459 tons will be produced by each Louisiana processor, we recommend that the estimate be on the following basis: First determine the average processings from proportionate shares cane for each processor for the three crop years, 1938-39, 1939-40, and 1940-41. Take the sum of all of these three year averages and divide each processor's three year average by this sum. (The resulting percentages are disclosed on the statement which I herewith offer in evidence). Multiply each of these resulting percentages or ratios by the estimated production from proportionate shares cane, 439,459 tons. This product will be a fair estimate of each Louisiana processor's production for the 1941-42 crop.

"After establishing the marketing base of each processor in the foregoing manner, marketing allotments for the calendar year 1941 are established by adjusting the total of all of the marketing bases to the 1941 quota for the mainland cane sugar area.

"In connection with this formula, we offer in evidence an exhibit disclosing 'Estimated Production of 1941', 'Past Marketings Best Option', 'Marketing Allotment Basis', and 'Allotment', all computed in accord therewith.

"Each of these formulas take into consideration the necessary standards as prescribed in the Sugar Act. Each of them, under the facts offered in the record of this hearing, and particularly the facts which I have related, affords a fair, efficient and equitable distribution of the quota. Each affords a maximum of protection to the producers of sugar cane. The strongest argument which we can offer in support of both formulas is that although the method of deriving the processings from proportionate shares component in each is entirely different, taking into consideration different crop years, the allotment of every processor calculated under either of the formulas, varies but little."

(*From the 1940 Avoyelles Parish County Agent's Annual Narrative Report, Percy A. Lemoine*)

"Increase the grower's net returns from Sugar Cane is the greatest problem facing the industry at this time. To cope with this problem the Agent stressed approved varieties, rotation, shallow cultivation, and the planting of cover crops. Copies of Extension Circular 151 giving all recommended practices in detail were placed in the hands of every cane producer.

The annual Sugar Cane field day held at the Louisiana Experiment Station in Baton Rouge was attended by several leaders and the County Agent. No field day was held in Avoyelles, due to inclement weather and unfavorable showing of test plots."

Cooperative Project Aids Control of Parasites in Farm Work Stock

(By C. L. Hill, Extension Animal Husbandman)

A cooperative project, under auspices of the Louisiana Agricultural Extension Service and the Louisiana Veterinary Association, is one of the noteworthy developments in recent years for the control of internal parasites in farm work stock. The work was begun five years ago in five parishes of the state, when 1,800 animals were treated. Last year, 1940, farmers in 22 parishes participated in the program, through which 25,000 horses and mules were treated.

Procedure under the cooperative project has been to have all animals in a given area treated by a competent veterinarian, the animals being brought to a central community point for the purpose. The community worm treating days have proven very popular with farmers, since treatment for animals is obtained at a nominal fee as compared with that where one or two animals are treated for an individual. Where dental work is necessary, the veterinarian is able to give treatment at the same time.

Without the cooperation of the veterinarians this program would not be feasible. The methods followed are comparatively simple, but professional treatment and advice are essential since successful results depend on proper administration of effective remedies. Faulty administration of volatile remedies may produce death.

The common parasites of horses and mules in Louisiana include the various kinds of botflies stomach worms and palisade worms. These and other parasites cause indigestion, colic and loss of vitality. Colts are more susceptible than mature horses, although chronic or longstanding parasitic infestations of older animals lead to unthriftiness and general ill health. Despite the prevalence of parasitic diseases among work stock in Louisiana, these troubles have attracted less attention than contagious diseases. Generally, the early stages of parasitism are often scarcely noticeable. However, the animals gradually slump in condition and in time are often spoken of by farmers as being slightly off feed, or as "hard keepers." Usually the cause is not suspected and no control or preventive measures are taken for many months.

Parasites cause injury and loss to the animal and its owner in many ways. Botflies are dangerous pests when they are laying eggs on the nose, throats and legs of the animals during the summer months. Often work animals become unmanageable when attacked. The bot, when attached to the stomach walls produces irritation and interferes with digestion as well as causing the stomach walls to become thickened. Palisade worms attach themselves to the lining of the intestines and cause intense irritation. Certain stages of some of the parasites invade the blood stream of the intestines and cause painful colic and in some cases death. The pin worm causes irritation and may induce the animal to rub posterior parts on hard objects. The horse or mule that harbors parasites must feed them. Therefore, animals which are infested with parasites require more feed than those which are free from the pests. Such an animal is unable to do a normal amount of work. Animals which are infested with parasites are more susceptible to bacterial disease. Some parasites secrete poisons or toxins that injure the host. Palisade worms frequently produce a chronic inflammation of the intestines. Bot flies often cause the animal to constantly stamp the feet, which may result in broken hooves.

The common procedure followed in the control of internal parasites is to treat the infected animal with a drug that will remove the parasites. This method is only temporary, however, and must be repeated at intervals, depending on the parasites present. Carbon disulphide is administered where bots are most prevalent; other drugs must be used against palisade worm. A definite regimen of fasting before and after treatment is essential. In the North Louisiana hill parishes it has been found that botflies are most prevalent in work stock, and in the alluvial areas the palisade worm gives the most trouble. The cooperative program undertaken by the Extension Service and the veterinarians of the state has proved to be of vast importance to the farmers and their workstock wherever it has been initiated. See your County Farm Agent.

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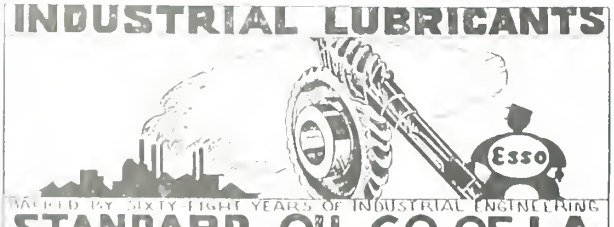

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Sugar Is Stirring

(By C. J. Bourg)

There has been conversation about a general revision of the Sugar Act, but no written-out plan has yet been offered at this session of Congress. Bills have been introduced to make needed changes in the 1941 continental quotas and in other provisions affecting the marketing of sugar, but the only measure which has received committee consideration is the Coffee Bill (H. R. 3582). This bill proposes that if the Secretary of Agriculture should determine that the Philippine Islands will be unable to deliver their quota, the deficit shall be allocated proportionately among domestic sugar areas.

The Sugar Act now provides that any Philippine deficit shall be allocated to "foreign countries other than Cuba." The history of that provision in the law originated in the fact that the Sugar Act of 1937 allotted to the Philippine Islands a basic quota of 1,029,000 short tons, raw value. The Philippine Independence Act provides that there may be brought each year into the United States from the Philippines free of tariff duty 850,000 long tons of sugar. This duty-free limitation averages out, in round numbers, to 982,000 short tons, raw value. Since 1934 the Filipinos have adopted the policy of exporting to the United States only the sugar which can be entered free of tariff duty; therefore, in 1937 the Philippine deficit was expected to amount annually to about 47,000 short tons, raw value, which the Secretary of State insisted should be made available for distribution among Pan American countries. The tonnage being relatively small in comparison with the basic consumption of 6,682,670 tons, and the proposal on the Philippine deficit being a part of a series of compromises under consideration in connection with the Sugar Bill, the provision was adopted by Congress.

Conditions have changed since 1937, however. For instance, in 1940 the Secretary of Agriculture did not determine that there was a Philippine deficit, and it follows that there was no re-allocation to "foreign countries other than Cuba' last year. But, this year there is prospect that the Filipinos may be unable to bring into the United States any sugar at all after April, or after any aggravation in the war threats involving the Pacific Ocean. The Philippine deficit for 1940 is now envisaged by the sugar trade as possibly amounting to 500,000 tons or more. As previously written in these columns, the freight rates on sugar from the Philippines have gone up more than 400%, and the shipping reports are that there are no cargo vessels to be had. It may be that the U. S. Maritime Commission, through its Division of Emergency Shipping which is handling ocean freight priorities, will include sugar as one of the items to be given preference. It is well known that the Division has been working very closely with the national defense agencies for the purpose of importing strategic materials. However, as far as shipping facilities are concerned the market has issued reports that no commitments for cargo space can be secured beyond April.

The Coffee Bill may properly be said to be an emergency measure. It would definitely guarantee that the American consumers will continue to be able to secure sugar at reasonable prices, regardless of rising ocean freights and the scarcity of boats. It must not be overlooked that the freight rates on Cuban sugar have also risen from a normal 12c to an asking rate of 42c. Similar increases necessarily apply to foreign countries other than Cuba. Consequently, the change in the Sugar Act proposed by the Coffee Bill would make available additional supplies of domestic

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MARCEL J. VOORHIES, Editor

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sugar now warehoused in the United States, which can be moved readily into interstate commerce without being exposed to the hazards of ocean traffic or to the increasing costs of freight and insurance to which all imports are now subject.

Considering the situation from the standpoint of the United States beet sugar area and the mainland cane area, they have supplies of sugar which can be furnished to the market immediately in sufficient quantity to replace any Philippine deficit. As this comes about, the stocks of continental sugar currently on hand would be consumed at the rate and in such volume as to insure a relatively small carryover inventory into 1942. This would mean that the proportionate-share acreage for 1942, to be allotted sugar-cane farmers and sugar beet growers, could be increased over 1941 and probably brought back to the normal levels of 1938 acreage.

The Secretary of Agriculture has pointed with pride and satisfaction to his Annual Report to the creation of an ever-normal granary in domestic sugar. The supplies of domestic sugar which exist in the United States today, over and above quota requirements, are said to have been built up in order to protect the consumers against shortages of sugar as an essential food in national defense. It would be an absurd contradiction of federal policies if now that there may be a deficit from a normal source of supply, the consumption requirements in the United States were to be made up from sugar surpluses in foreign countries. The sugar produced in the United States was produced for consumption in the United States. The sugar produced in foreign countries was produced for export to Europe and other foreign markets.

Under these circumstances, it is dismaying to American farmers, who with practical patriotism certainly want to go along with the national defense program in every particular, to learn that objections have been raised to the coffee proposal by the State Department. The Secretary of State and the Secretary of Agriculture have requested the House Committee on Agriculture to be heard in opposition to the Coffee Bill. The request of the Secretary of State is reported to include an expressed preference that his hearing be held in executive session. A hearing date had been set for March 4th; but, due to the inability of the Cabinet Officers to appear in person, it has been postponed without definite date.

Meanwhile, representatives of the domestic sugar industry have been examining the record to see to what extent the "foreign countries other than Cuba" have availed themselves of Philippine deficits in past years. According to the reports of the Department of Agriculture, the deliveries under the Sugar Act of 1937 have been as follows:

Year	Philippine Deficits Officially Determined	Foreign Countries Other Than Cuba		
		Final Quotas	Deliveries Charged Against Quotas	% of Charges Against Quotas
	(Short Tons, Raw Value)			
1937	86,805	114,641	89,155	77.77
1938	53,883	80,683	75,114	93,10
1939*	59,111	85,812	62,021	72.28
1940	None	24,177	17,400	71,97

*The President having suspended sugar quotas on September 12, 1939, there were no quota restrictions on the importation of sugar from foreign countries from September 12th to the end of 1939.

On the basis of experience, therefore, the record demonstrates that these foreign countries are not a dependable or usual source of sugar supply for the United States. On the contrary, they have repeatedly failed to avail themselves of the quota allotments they have been given in the past.

* * * *

How Sugar Is Consumed

The Department of Commerce has just released a statement on the quantity of sugar used by manufacturers of food products and beverages, which statement contains facts about the consumption of sugar that are bound to be very interesting to our members. The report, reproduced in full below, shows that 40% of the sugar consumed in the United States reaches the ultimate individual consumer not as granulated sugar, but in the form of candy, cake, ice cream, other food products, and beverages. Now, that means that only 60% of the sugar consumed is obtained by purchase at retail stores. Even some of that 60% is bought by large hotels and restaurants at wholesale prices. The sugar directly consumed in eating places throughout the country necessarily represents a considerable part of that 60%, and the person who consumes or uses sugar with his meal is charged nothing for it. The lady who does not use sugar in her coffee, or the man who does not put sugar on his cereal, pays the same price for a cup of coffee or a bowl of oatmeal as the fellow with a sweet tooth who uses several spoonfuls.

It will be noted that the Department of Commerce has found that the manufacturers paid an average of

4½c a pound for sugar, which is well below the retail price.

All of these facts should be kept in mind when inflated figures about the estimated total cost of sugar to American consumers are published. At least the Department of Commerce report establishes the clear fact that the cost to consumers for sugar in the United States cannot be accurately computed by multiplying the retail price of sugar by the total consumption of the United States.

Department of Commerce Sugar Statistics

Approximately 40 per cent of the total sugar production of United States refiners annually is used in the manufacture of foods in commercial factories constituting the food products and beverage industries, according to statistics compiled by the Census Bureau.

Establishments in the food and beverage industries, producing 98.3 per cent of the nation's commercially manufactured foods and beverages, reported consumption, in 1939, of 4,634,711,850 pounds of sugar costing $211,622,920, or four and one-half cents a pound. During the same year, sugar refiners reported an output of 11,983,459,800 pounds of refined, granulated, and clarified cane, beet and corn sugars.

The sugar consumption reported by the food products and beverage industries included 3,246,632,650 pounds of cane sugar, 1,079,012,500 pounds of beet sugar, and 309,066,700 pounds of corn sugar.

The bakery products industry was the largest single user of sugar in the food industries group with 1,256,012,386 pounds, costing $58,948,204. This included 742,210,826 pounds of cane sugar; 383,127,668 pounds of beet sugar, and 130,673,892 pounds of corn sugar.

Second heaviest industrial sugar users were confectionery and related products. Factories accounting for 96.6 per cent of the industry's production reported consumption of 1,052,129,634 pounds of sugar costing $47,506,288.

The canned and preserved foods industry, producing 99.8 per cent of the industry's output, was the third largest sugar user with 624,571,391 pounds costing $28,158,853.

Fourth largest user was the beverage industry with 567,473,543 pounds costing $26,151,764, of which 464,884,942 pounds were used in manufacture of nonalcoholic beverages; 80,989,410 pounds in making malt liquors; 17,947,143 pounds in wineries, and 3,652,048 pounds in blended or rectified liquors.

Other large users of sugar were: Flavoring extracts and sirups, 447,866,044 pounds; dairy products industry, 341,148,674 pounds; meat products, 52,290,600 pounds, and grain mills and prepared cereals, 51,506,887 pounds.

The tobacco products industries are large consumers, using 40,729,610 pounds. Of this total, 20,781,799 pounds were used in manufacture of cigarettes; 19,817,294 pounds in chewing and smoking tobaccos and snuff, and 130,517 pounds went into cigars.

Returns from and Cost of Producing Sugar Cane in Louisiana, 1938

(J. N. Efferson)

There are two common methods of computing enterprise costs on farms having a specialized crop as the principal, but not the exclusive, source of farm receipts. The "net cost" method charges all farm expenses, both direct and indirect, to the main enterprise and credits this main enterprise with all receipts from the minor sources of farm income. An alternative method termed "direct allocation" considers each farm enterprise independently, charging each crop with its direct expenses and its reasonable share of the various indirect expenses necessary to farm operation. Neither of these methods by itself gives an entirely accurate presentation of costs of any one enterprise. A comparison of the results of the two methods reveals contracts and relationships important for a thorough understanding of the nature of farm production costs.

This article presents a summary of both methods as used in the analysis of costs and returns on sugar cane farms in Louisiana during the 1938 crop year. Records from 500 sugar cane farms were included in the analysis of net costs. Except for two records the same group was also used for the direct allocation method of analysis.

The Net Cost Method of Computation

Current Cash Costs. By the first method, the average current cash costs of producing sugar cane were $2351 per farm, $62 per acre, or $2.81 per ton of cane sold (Table 1). Current cash costs are those paid in cash to operate the farm and include hired labor, power, seed, feed, fertilizer, general repairs, taxes, and a number of relatively small miscellaneous items. Hired labor made up more than two-thirds of all cash costs in 1938 and amounted to $1545 per farm, $41 per acre of sugar cane, or $1.85 per ton of cane sold.

Table 1. NET COST METHOD FOR COMPUTING SUGARCANE. Production Costs and Returns, 500 Louisiana Sugarcane Farms, 1938.

Costs and returns	Per farm	Per acre	Per ton	Proportion of total cost
	Dollars	Dollars	Dollars	Per cent
Current cash cost (total)	2351	62.38	2.81	54.7
Hired labor	1545	41.00	1.85	36.0
Operating power equipment	154	4.10	.18	3.6
Fertilizer and other materials bought	210	5.56	.25	4.9
General repairs	126	3.34	.15	2.9
Taxes	70	1.85	.08	1.6
Other	246	6.53	.30	5.7
Special cost (total)	1949	51.69	2.33	45.3
Operator's time	430	11.42	.51	10.0
Family labor	208	5.50	.25	4.8
Land rent	210	5.58	.25	4.9
Current capital investment	384	10.17	.46	8.9
Depreciation	234	6.21	.28	5.5
Interest	483	12.81	.58	11.2
Total cost	4300	114.07	5.14	100.0
Mixed credits (total)	714	18.94	.85	.....
Other crops sold	332	8.80	.40	.....
Livestock and livestock products sold	81	2.16	.10	.....
Other	301	7.98	.35	.....
Net cost of sugarcane	3586	95.13	4.29	.....
Income (total)	3075	81.57	3.68	.....
Sugarcane sold	2285	60.63	2.73	.....
AAA payments for sugarcane	790	20.94	.95	.....
Profit or loss	–511	–13.56	–0.61	.....
Labor income	–81	.....	.....	.....

Net Cash Costs. Receipts from sources other than sugar cane amounted to 10 per cent of all receipts. These mixed credits have been subtracted from the current net cost to obtain the net cash cost of producing sugar cane. This procedure is justified on the basis that the cash cost of producing the miscellaneous mixed credit items is included in the total current cash cost. Mixed credits on the farms studied averaged $413 per farm.

The average net cash cost of producing sugar cane, after mixed credits had been subtracted from the total current cash costs, amounted to $1938 per farm, $51 per acre of sugar cane, or $2.31 per ton of cane sold.

Special Costs. A farmer ordinarily thinks of his

expenses in terms of cash paid out during the year. From a strict accounting sense, however, there are numerous other expenses of operating a farm which may not be actual cash expenditures during a particular year. For this study, these expenses have been grouped together as "special costs". The special costs include the estimated value of the operator's labor and management, the value of unpaid family labor, interest on the average investment (at 5 per cent), rent, if all or part of the land is rented, and depreciation on land, buildings, equipment, and livestock.

Special costs on the farms studied averaged $1648 per farm, $44 per acre of sugar cane, or $1.98 per ton of cane sold. Interest on the investment for all owned farms plus the actual rent paid for all rented land amounted to 42 per cent of all special costs; operator and unpaid family labor, 39 per cent; and depreciation, 19 per cent.

Profit or Loss. The income from sugar cane, including sugar cane sold and AAA payments, averaged $3075 per farm, $82 per acre of sugar cane, or $3.68 per ton of cane sold.

The average cash profit above the current cash expenses, after the net cash costs had been subtracted from the receipts from cane, amounted to $1137 per farm, $30 per acre of cane, or $1.37 per ton of cane sold. This represents the amount the average farmer had left over to pay rent, interest on any debts or mortgages outstanding, and to keep up his farm and his family for the year.

The net profit from an accounting sense, after a charge had been made for all non-cash expenses by subtracting the total special costs from the cash profit, amounted to a loss of $511 per farm, $14 per acre of sugar cane, or $0.61 per ton of cane sold. This does not mean that the average farmer lost that much cash during the year. It indicates what he would have lost if he had paid himself and his family fair wages, paid rent on rented land and an interest charge of 5 per cent on his investment of owned property, and kept up the depreciation of land, buildings, livestock, and equipment by spending enough to keep all property just as valuable at the end of the year as it was at the beginning.

The operators estimated that the value of their labor and that of the family which was not paid for in cash averaged $638 per farm. If all expenses except the estimated value of this labor are subtracted from the total returns, it is found that each family actually made $127 for its year's work.

In addition to this return for labor, each farm family had the use of the livestock, livestock products, vegetables, and crops produced on the farm during the year. The value of these farm privileges received by the farm family during the year averaged $321 per farm. Thus the total return to the average farm family for the year's work, after all cash and non-cash expenses are considered as paid, averaged $448 per farm or about $38 per month.

The Direct Allocation Method of Computation

Costs. The total cost of producing sugar cane, according to the direct allocation method, amounted to $2607 per farm, $63 per acre, or $2.90 per ton (Table 2). Of this total amount, man labor at $1259 per farm, $31 per acre, or $1.40 per ton was the largest single item of expense, making up 48 per cent of the costs. Man labor includes the cost of hired labor, and a charge for the operator and family's labor on the same enterprise.

Table 2. DIRECT ALLOCATION METHOD FOR COMPUTING SUGAR CANE.

Production costs and Returns, 498 Louisiana Sugarcane Farms, 1938.

Item	Per farm	Per acre	Per ton*	Proportion of total cost
	Dollars	Dollars	Dollars	Per cent
Costs:				
Man labor	1259	30.52	1.40	48.3
Workstock	383	9.29	.42	14.7
Tractor use	124	3.01	.14	4.8
Truck use	45	1.08	.05	1.7
Auto use	52	1.25	.06	2.0
Machinery use	129	3.13	.14	4.9
Land use	201	4.88	.22	7.7
Fertilizer	100	2.42	.11	3.8
Seed cane	185	4.49	.21	7.1
Miscellaneous	129	3.12	.15	5.0
Total cost	2607	63.19	2.90	100.0
Returns:				
Cash	3166	76.73	3.52	94.7
Non-cash	178	4.30	.20	5.3
Total returns	3344	81.03	3.72	100.0
Net profit	737	17.84	.82	.....
Return per hour of man labor	.221	.....	.....	.....

*Per ton of cane harvested.

The cost of workstock averaged 10 1/2 cents per hour of work. Applied to sugar cane, workstock costs amounted to $383 per farm, $9.29 per acre, or $0.42 per ton. This workstock charge was 15 per cent of the total cost. The outlay for tractor use amounted to $124 per farm, $3.01 per acre in cane, or $0.14 per ton. Truck expense averaged $45 per farm, $1.08 per acre, or $0.50 per ton, while the charge to cane for automobile use was $52 per farm, $1.25 per acre, or $0.06 per ton. The average cost of operating trucks, including interest and depreciation, was about $0.05 per mile, and that for automobiles averaged about $0.04 per mile. Machinery costs—interest, depreciation, repairs, use of buildings, and upkeep—amounted to $129 per farm, $3.13 per acre, or $0.14 per ton. The average land use cost was $201 per farm, $4.88 per acre, or $0.22 per ton. On rented land the rent paid for land producing cane was included in addition to certain expenses of upkeep. Taxes and interest, the latter computed at 5 per cent of the investment, were charged along with other minor expenses when the land was owned by the operator.

Fertilizer cost was $100 per farm, $2.42 per acre in cane, or $0.11 per ton. These figures included both fertilizer purchased and the value of the manure produced on the farm and applied to the cane crop. The average seed cane expense was $185 per farm, $4.49 per acre in cane, or $0.21 per ton of cane harvested. Most of the seed cane was grown on the farm where it was used. Miscellaneous items of minor importance amounted to $129 per farm, $3.12 per acre, or $0.15 per ton of cane. The costs of man labor, workstock, and land use together made up almost three-fourths of the total expense.

Income. Total returns to the cane enterprise averaged $3344 per farm, $81 per acre, or $3.72 per ton of cane harvested. About 95 per cent of this amount was cash income from the sale of cane for the production of sugar and from AAA payments.

Net profit from the cane enterprise amounted to $737 per farm, $17.84 per acre, or $0.82 per ton. This profit is the difference between the cost of producing the cane crop and the total returns from cane. When the net profit is added to the cost of man labor previously included as an operating cost, the return to the farmer for his labor was $0.22 per hour.

Comparison of Costs as Computed by the Two Methods

By the "net cost" method of calculating costs, the farms studied had an average net cost for producing cane of $4.29 per ton, whereas the "direct allocation" method arrives at a much lower cost of $2.90 per ton. If sugar cane were grown on all the crop land and no other enterprises were carried on, theoretically the cost by both methods should be the same. The explanation of the great difference revealed in this study lies in the fact that under the "net cost" method sugar cane costs are diminished or increased by profit or loss resulting from the operation of other farm enterprises. Some of these other enterprises, such as corn, are necessary crops in sugar farming, but other enterprises, such as commercial truck crops, should not logically be combined with costs of cane production. When all enterprises are charged to sugar cane by the "net cost" method, losses in years such as 1938 when truck crops were unprofitable result in unjustifiably high cost figures for sugar cane.

On the other hand, the "direct allocation" method which assumes that the sugar cane enterprise is completely independent of the balance of the farm enterprise is also faulty because it fails to give sufficient weight to the complementary nature of most farm enterprises. The selection of a final figure representing the cost of any specific farm enterprise must always be rather indeterminate within the upper and lower limits set by the two different methods of computation.

Farm Poultry Production for Louisiana

Clyde Ingram, Extension Poultryman

The spring months are important months in the development of a farm flock of chickens, for it is during the months of March and April that plans are made for poultry flocks to supply poultry and eggs during the year.

It is certainly good farm management for every farmer in Louisiana to have a flock of pure bred chickens of sufficient size—hatched at the right time, fed and cared for in such a way as to supply the family with poultry and eggs throughout the year with probably a small surplus to sell.

According to data obtained from the Bureau of Agricultural Economics, USDA, there is still a definite need for more and better poultry in Louisiana. Based on 1938 survey, the average annual production per hen in Louisiana was 75 eggs as compared to U. S. average of 105 eggs. The average consumption of both poultry and eggs in Louisiana is considerably below the average of the United States. If we consume as much poultry products as the average United States it will be necessary to greatly increase our farm poultry production.

The total value of poultry and poultry products in Louisiana during 1940 amounted to approximately eleven million dollars.

We have at the present time 30 Louisiana hatcheries cooperating with us in producing a better quality of baby chicks. These hatcheries are all operating as U. S. Approved Pullorum Tested hatcheries, which means they are hatching eggs all coming from flocks that have been carefully culled for egg production, tested for pullorum disease and the undesirable birds removed from the flocks before hatching eggs are produced. We have at the present time approximately 1,000 carefully culled and blood tested flocks, furnishing hatching eggs to these hatcheries, which means that our farm people in Louisiana are now able to put out quality baby chicks from our own Louisiana hatcheries, and as a general rule, chicks, produced from their own breeding flocks, hatched in their own hatcheries in Louisiana will give better results than chicks shipped to us from distant points that are not adapted and acclimated to Louisiana conditions.

Under average conditions it is recommended that the average farmer who is interested in having just enough chickens and eggs for his own use could well afford to buy 100-150 Louisiana U. S. Approved Pullorum Tested chicks from our Louisiana U. S. Approved Pullorum Tested hatcheries. A farm flock of 30 laying hens and pullets, hatched at the right time and given good care and management, should produce enough eggs for an average family of five people to have one egg per day per person throughout the year. A farm flock of 30 laying hens should have one bushel of shelled corn or its equivalent in other grains per hen per year. In Southwest Louisiana rice by-products can be used to replace part of the corn. Oats may be used as a substitute for corn as it makes an excellent grain feed for chickens in addition to furnishing grazing.

For the average small flock owner our homemade lamp brooder—a copy of which can be secured from your county or home demonstration agent's office—is strongly recommended for brooding baby chicks brought off at this time of year. This brooder is easy to build, cheap and very economical to operate. There are probably over ten thousand of these homemade lamp brooders in use in Louisiana at the present time.

The baby chick ration, or the feed that they are going to receive the first ten weeks of their life is very important. A good commercial chick ration, or a dependable home-mixed ration should be used. The following all mash ration has been developed by the Agricultural Experiment Station of the Louisiana State University, and gives excellent results in raising baby chicks from one day old up to ten weeks of age.

This ration consists of the following ingredients:

52 pounds ground yellow corn
26 pounds wheat bran
17 pounds shrimp meal or meat scraps
5 pounds dried milk
½ pint cod liver oil

This should be mixed thoroughly and fed as an all mash ration and kept before the chicks at all times. The easiest way to mix the cod liver oil is to first mix it with the wheat bran and then mix the wheat bran with the other ingredients.

Approximately 350-400 pounds of feed will be needed per 100 chicks for the first 8 weeks of their lives.

Milk can be used as an excellent protein supplement for baby chicks, growing stock and laying hens. Milk contains proteins, vitamins and minerals, all of which are essential in feeding chickens. Thirty laying hens can use 1 gallon sour milk per day very profitably. Chicks and growing stock can make use of 1 gallon of sour milk per 100 chicks per day very profitably.

In feeding milk, care should be taken to see that it is fed in clean containers, a constant supply available and precautions taken to eliminate fly infestation.

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A Progress Report on Development of Cold Tolerance in Sugarcane Varieties

Mr. Stephen C. Munson, February 12, 1941.
Chairman, Contact Committee,
American Sugar Cane League,
407 Carondelet Street,
New Orleans, Louisiana.

Dear Mr. Munson:

In response to your request of January 9, I am submitting a brief report regarding the status of the wild seedling work as it relates to cold tolerance. The wild canes originating from seed obtained from Turkestan continue to show high resistance to rather severe freezing temperatures, a large percentage of the eyes and terminal buds surviving repeated freezing temperatures ranging from 15 to 25 degrees F. during the winter of 1939-40.

The breeding program dealing with the cold-resistant canes and desirable breeding stock from commercial varieties of sugarcane has progressed rapidly. There are now available the F_1 hybrids, the first and second backcrosses to the commercial parent, and the first and second outcrosses to other commercial canes. Selected material from all of these progenies is of value in breeding improved sugarcanes for the United States. It is worthy of note that among the seedlings of second generation (first backcrosses and first outcrosses) the essential characteristics of commercial canes are present, i. e., the stalk diameter and length and sucrose content of commercial canes. They have not been grown in Louisiana as yet but judging by their growth at Arlington Experiment Farm, Arlington, Virginia, it may be assumed that under Louisiana conditions their yielding capacity will prove favorable. Several hundred selections were planted at Houma last fall.

There is evidence that the stubbles of the F_1 hybrids are more resistant to cold and are able to start growth earlier in the spring at lower temperatures than the present commercial varieties. It would seem reasonable, therefore, to assume that the seedlings of the second generation and those more highly bred will retain this characteristic in part.

To what extent the cold resistance of the stalks and leaves of the wild canes can be transmitted to progenies of crosses with commercial parent canes cannot be predicted. In a planting of F_1 hybrids at the U. S. Sugra Plant Field Station, Houma, La., the stalks were killed down to or nearly to the ground as a result of the freezing temperatures of November 15

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and 16, 1940. (It was 22 degrees F. both nights at the station, and the night of November 15, and the morning of November 16, the temperature was 32 degrees and below for 13 hours and 30 degrees and below for 12 hours). However, a larger number of sound lower (basal) eyes were found in the hybrids than in the commercial varieties. Occasionally there were 2, 3, 4, and even 5 lower eyes on a stalk that were sound. These data indicate slightly greater cold resistance than found in the commercial varieties.

In cooperation with the Louisiana Experiment Station a cold-test plot has been established in northern Louisiana. Similar plots will be planted this spring at different latitudes in other states. It is essential in this work to have plots so located that the seedlings will be subjected to temperatures low enough to injure all except the most resistant. From our experience at Arlington Experiment Farm, we know that the plot there is too far north. It will not be known until next winter whether or not the sites chosen are in the best regions but if they are not satisfactory the information gained will help in selecting more appropriate locations for testing for cold resistance.

If we consider the extreme earliness of the wild canes and the hybrids, the apparent superior stubbling qualities and the slightly greater cold resistance of the stalks and leaves of the F_1 hybrid, and the presence of essential commercial characteristics in the later crosses, it would seem that our efforts may yield very promising seedlings in the future.

With kind regards,

Very truly yours,

E. W. Brandes,
Head Pathologist in Charge,
Division of Sugar Plant Investigations.

Committee Meetings

A meeting of the Executive Committee of the American Sugar Cane League was held at the New Orleans office at 1:30 P. M., Wednesday, February 26th, 1941.

Members present were: Messrs. W. F. Giles, President, presiding; W. C. Kemper, George L. Billeaud, M. J. Voorhies, Frank L. Barker, Walter Godchaux, Jr., Warren Harang, E. N. Kearny, Howard J. Olivier, James A. Lanier, John M. Caffery, Stephen C. Munson, Charles A. O'Brien, Louis Robichaux, and Reginald Dykers.

Visitors present: Messrs. L. G. Ebeling, Louis LeBourgeois, Paul G. Borron, Jr., T. M. Barker, and Walter A. Sullivan.

The report of the Treasurer was submitted and approved.

Among other routine matters Mr. Stephen C. Munson the Chairman of the Contact Committee, and Mr. George L. Billeaud, a member of the Committee, reported on a plan for the Contact Committee to meet with the scientists of the State and Federal Stations at the Houma Station for the purpose of surveying the fields with the view of establishing a disease free seed cane area.

A joint meeting of the Sugar Standards Committee and the Sugar Marketing Allotment Committee was held in the Agricultural Extension Division Building at 2 P. M., March 7, 1941.

Members present: Messrs. R. M. Murphy, Chairman of the Sugar Marketing Allotment Committee; Frank L. Barker, Chairman of the Sugar Standard Committee; Walter Godchaux, Jr., R. H. Chadwick, E. J. Gay, Abbott Isaac, M. V. Yarbrough, and Paul G. Borron, Jr.

Visitors present: Messrs. C. F. Dahlberg, D. W. Pipes, Jr., E. L. Dennis, Dr. W. L. Owen, Dr. A. G. Keller, and M. J. Voorhies.

The brief to be submitted to the Hearing on 1941 Marketing Allotments was read by Mr. Borron and with minor changes was unanimously adopted.

Plans to protect the Louisiana production of direct consumption sugar were discussed.

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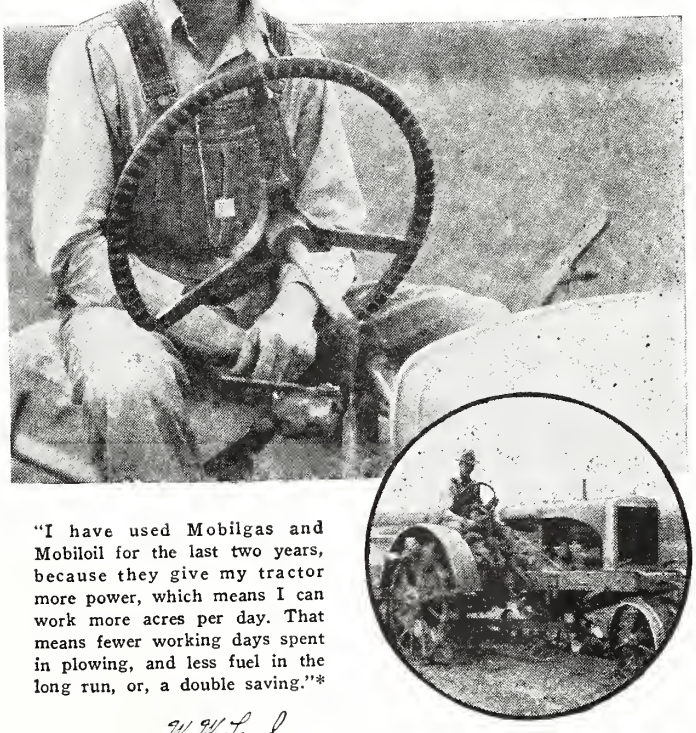

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*This is a voluntary statement for which no compensation of any description was given to Mr. Loyd.

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against Foreign Competition

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War Experience and Sugar

(By C. J. Bourg)

We are passing through a history-making period. The value of the continental sugar industry to the consumers of the United States is being demonstrated again. The first World War proved to the American people the importance of having a constant supply of sugar at home and available. It was only after the war, when domestic supplies of sugar had become exhausted, that foreign producers enjoyed a profiteering period which cost the American consumer upward of 25c a pound for sugar.

If the first World War taught a lesson in regard to sugar, it was that continental production of sugar in the last analysis becomes the most effective safeguard of adequate supplies at reasonable prices which the consumers of sugar in the United States should have at all times. Every nation in the world has sought to make itself self-sufficient in sugar since 1918, excepting the United States, where there has been only a restricted partial attempt at self-sufficiency.

For years the American Sugar League has sounded the warning that the voice of experience should be heeded by the U.S. Government and that American farmers should be permitted to produce more sugar, as a cash crop for themselves and as a protection to the consumer in supply and in price. Even some of our friends have at times felt that the matter was being over-emphasized, based upon that "It can't happen here!" feeling which has existed with regard to national defense as well as with regard to sugar supplies. But gradually the restrictions of war in all parts of the world are bringing about the emergency about which we have warned so many times.

The price of sugar has risen progressively in the past few months. The increase in price has not yet reached the levels which can honestly be termed abnormal or excessive. True enough, there have been increases from the low levels of 1940, when several national records were established on sugar prices—raw, refined, and retail. There has been a restoration of prices towards normal levels for raw sugar and refined sugar, and so far the retail prices of sugar to the ultimate consumer continues to be fair and reasonable and acceptable to the housewife.

Getting right down to the bare facts, everyone who is informed on the sugar market knows that the recent increases in price on raw and refined sugar have been brought about almost exclusively by corresponding increases in the rates of ocean freight and insurance, and because of the scarcity of cargo vessels. In the case of the Philippines, there is the prospect of no facilities for transporting sugar across the Pacific Ocean. What is stabilizing the United States sugar market and keeping it from running away? It is the existence of supplies of sugar within the United States, sufficient to meet ordinary emergencies until the 1941 new-crop sugars become available. It is the domestic sugar industry which is the protective insurance policy.

One buys fire insurance year in and year out, even though no fire occurs. Often when the fire insurance premium becomes due, the insured hesitates to pay the premium. It seems so unnecessary because there has been no loss by fire. But good common sense and business judgment establish the value of fire insurance on the basis of the law of averages. The same reasoning is applicable to any nation protecting itself against a shortage of essential foods, both in the volume of supply and in the price of the food. There is no necessity for any elaboration of this discussion,

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as the facts are clear and the conclusions inescapable with respect to the value and importance of the do-sugar industry within the United States.

In the U.S. Senate a few days ago there was a discussion of the sugar situation. Instead of describing the debate in our own words, we are inclined to believe that our readers would like to read some of the important points made by Senators from different parts of the Union. Their remarks will give some idea of the trend of thought in Congress. Senator Ellender of Louisiana brought up the subject of policies with regard to price and available quotas, with this statement:

"When the Sugar Act of 1937 was considered, it was my understanding, and the understanding of many Senators who supported its enactment, that it would produce a condition whereby raw sugar would sell for between $3.35 and 3.65 per hundred. To my knowledge it has never reached that point since the fall of 1939 when war was declared in Europe. On the contrary the price of raw sugar has been held down, somehow, to as low as $2.60. The price of raws was disastrously low during the fall of 1940 when the Louisiana sugarcane farmers were marketing their crop.

"As I understood the bill, just about enough sugar was to be permitted to enter the country so that, when added to the amount we produce, the supply would be equal to our demand, and in that way prices would be maintained at a reasonable and fair level. However, it does not seem to have worked that way. Always more sugar than we could consume has been permitted to enter the country, and as a result, sugar prices have remained at abnormally low figures.

"As I have just indicated, because of an increase in the price of sugar, a proposal is now under consideration, so I understand from this article, to let more sugar come into the United States, in the face of an abundance of sugar already on hand, and a further curtailment by the Department of continental sugar acreage. That does not make sense.

"Mr. President, I believe that under the act as it is now written, if there be a shortage of sugar, because of lack of facilities to transport it, the Department could well make at this time a reallocation of sugar quotas, allotting the deficiencies of Hawaii and other domestic areas to continental producers, thereby giving the beet-sugar farmers of the West an opportunity to plant their full acreage this year, as they have done in the past; and, by the same token, the sugarcane-producing States should be permitted, and could be permitted, to plant and harvest more acreage in sugarcane. If that cannot be done under the law then it should be amended without delay. Certainly a reallocation of the Philippine quota should be made in accord with the provisions of a bill sponsored by the distinguished Senator from Colorado (Mr. Adams)."

When Senator Ellender later mentioned the sugar beet acreage reduction, which he stated as amounting to about 26% in Colorado, the following discussion ensued:

Senator Johnson of Colorado: "The Senator has stated the case exactly. This cut is going to bring about the closing of perhaps four of our factories in Colorado, With a resultant complete upset of the whole community's economic situation, which in that State is built entirely around sugar. We have built our farming and our whole community right around the production of sugar; and yet we shall be compelled to close perhaps four factories and to curtail and shorten the season for all the other factories in Colorado."

Senator Ellender: "I am in sympathy with your farmers and you can depend on me to help to the best of my ability."

Senator Langer: "The same situation exists in North Dakota. Our production has been cut 17%

Senator Ellender: "That is too bad. I hope Senators will take serious note of the situation. Let us get together at some time soon and consider a bill so that continental producers will obtain at least their just share of the sugar production necessary to meet our requirements." * * *

Senator Smith of South Carolina: Mr. President, I desire to direct the Senator's attention to what was reported to me. I am not familiar with the sugar business, except as I eat sugar. Recently I was in Florida and I had occasion to go near the famous Everglades. I think one of the most complete sugar factories in the country is located there. That soil, which I was informed was not very hard to clear up, is anywhere from 6 feet to 15 feet deep, and I was told that it would produce cane of unusual perfection. I said: "Well, why don't you clear up this land and expand your sugar business?"

"The reply was: "The Government will not allow us to do so."

"Here we are importing sugar and having the facilities for growing it, and yet we allot our people a

certain percent and we hand out the good-neighbor things. I suspect there are two or three "niggers" in this woodpile."

Senator Adams of Colorado: "Mr. President, practically, the situation as to the islands is that their sugar quotas are as large as their production and exportations have ever been. On the other hand, as to the beet areas, their production is being forced down by regulations far below what it has been. In other words, there has been no quota taken from the islands, but in the case of the beet areas, this year the number of acres upon which sugar beets may be produced is being reduced from 980,000 to 820,000. That reduction was made upon the theory that there was in the warehouse of the United States an abnormal carry-over of sugar, and, in order to equalize that, the beet areas were told, "You must cut your production." Yet there is no cut in the quotas or production of the islands; and particularly is it true of Puerto Rico that her sugar production has more than doubled in recent years. Hawaiian production has been going on about even, but I think, as the Senator from Maryland (Mr. Tydings) knows, Hawaii is producing almost to her maximum production, due to her land and water situation; so that if we were to say to Hawaii, "There is no quota imposed upon you," it would not make much change in Hawaiian sugar production."

Senator Norris of Nebraska: "I realize that, but it does not seen to me to be right; indeed, it seems to me to be fundamentally wrong, since we have in our country thousands of people who are clamoring for the right to raise beets and cane, in order to produce sugar, but who, because of the quota arrangement could not sell it if they produced it, and hence do not plant it. So as a practical proposition, today the beets are not planted, and there is an allotment of the number of acres which may be planted. If we had produced in the United States more sugar than we could consume, I could see the logic of prorating the amount of production of any State, of any factory, or any farm, but that is all out the window. Everybody knows if every farmer in our country produced without limit all the sugar which he could produce we would still be short more than half the sugar we consume."

Senator Vandenberg of Michigan: "I should like to refer again to another vice that is inherent in the situation against which the Senator is correctly complaining.

"When the Department of Agriculture reduces our sugar quotas this year 26 percent that may result in a 100 percent reduction. This is what I mean: Sugar-beet farmers cannot raise sugar beets unless there are factories to process the beets. The factories cannot run unless they have enough acreage to make it profitable to run. What the Department of Agriculture has done in the State of Michigan is to make it almost impossible for any sugar-beet factory to run as a result of this final curtailment of the acreage. Therefore, the Department makes it impossible for any farmer to raise sugar beets. So while the curtailment is a 26 percent curtailment mathematically, on the face of things, it may become a 100 percent curtailment; and I think it is without the slightest justification. I completely agree that a decent consideration for agriculture ought to require the Senate to act."

Senator Ellender: "Mr. President, I sympathize with the condition of the beet growers. I am in thorough accord with what the Senator from Michigan has just said. My State of Louisiana and the State of Florida have been suffering in like manner for the past 3 years. Our production has been curtailed to such an extent that it has been extremely difficult for the average farmer in those States to produce cane to advantage. I do admit that the small, one-horse farmer has not suffered much because of curtailment, but the medium-sized farmer has been subjected to tremendous cuts. In like manner the large producers have suffered."

As a result of the general discussion of sugar, references were made to pending legislation, as follows:

Senator Adams of Colorado: "I call the Senator's attention to the fact that while the production of sugar beets in the United States is being restricted by our Government, our Government is lending money to Cuba to increase the production of sugar in Cuba. That is hardly consonant with the furthering of a basic American industry."

"The Senator from Louisiana knows that we have an opportunity temporarily to meet this distressing situation by reason of the fact that freights probably are not available from the Philippine Islands for bringing in their quota; and there is pending before the Finance Committee a bill which would change the existing law. The existing law provides that if the Philippine Islands fail to market their quota of sugar, the deficit shall be distributed not among American domestic producers but among foreign producers. The bill pending before the Finance Committee merely changes that arrangement so that if there is a deficit, the deficit shall be divided among the American producers in whom we should have the greater interest.

"I have been very hopeful that the Finance Committee would have a meeting at an early date and take up this matter. The subject has been taken up with the senior Senator from Mississippi (Mr. Harrison), and we had assurances that there probably would be an early hearing before the Finance Committee. Now that the pressing matters before the Senate have been disposed of, I understand that the Senator from Mississippi, who is not well, is away from the city. I sincerely hope the senior Senator from Georgia (Mr. George), who is now in charge of the Finance Committee, will take over the problem of looking after the poor stepchildren in the sugar business, and will have a hearing and let us present the situation, and endeavor to relieve that pressing problem."

Senator Ellender: "I respectfully suggest that the Finance Committee hold hearings at once so that the Senate can act. As the Senator from Colorado knows, when he introduced his bill on the subject some time ago, I advocated its passage. I repeat that rather than increase the over-all quota, which would have the effect of forcing the already low prices of sugar to drop still lower, and making it so that farmers could not make any money on the production of sugar, I believe something ought to be done at an early date to redistribute the presently existing quota."

Following these appeals, a hearing was called by the Finance Committee on the Adams Bill (S. 937) for March 18th, and several witnesses heard, but the three Departments (State, Agriculture, and Interior) which had been requested to submit reports and pre-

sent witnesses, asked for further time so the hearing has been recessed. Up to this writing, no date has been set to hear the Departmental witnesses.

At the hearing Senator Ellender submitted the following letter for the record:

Dear Senator Ellender:

Mr. Pierson left rather unexpectedly for South America and asked me to reply to your letter of March 7th regarding Cuban Sugar financing.

Upon condition that the Cuban Government shall extend the operation of its present system of allocating sugar production (Decree Law 522); and shall limit its 1941 crop to 2,400,000 tons, we have agreed to finance up to 400,000 tons of such crop.

The basis of the financing is $4.00 per bag (total $11,200,000) and the loan is secured by the sugar; by the pledge of 6c per bag tax on total Cuban production during the life of the loan; and is guaranteed by the Cuban Government.

Provisions is made for amortization in equal annual amounts over a period of five years; as well as for the sale of not less than 50,000 tons annually at not less than the amount loaned ($0.0123 per pound). A crop of 2,400,000 tons represents a substantial reduction from previous years.

The sugar cannot enter the United States except, of course, as part of the Cuban quota.

Hoping this will give you the information desired, I remain,

Sincerely yours,

(Signed) W. L. Clayton,
Deputy Administrator
Federal Loan Agency.

Catching Cobwebs

The SUGAR BULLETIN is in receipt of a book of travels entitled "Catching Cobwebs" and published by the Knox Publishing Co., Durban, S. Africa. Its author is Mr. G. C. Dymond

For many years we have read Mr. Dymond's contributions to the scientific lore of the sugar industry, for he is, and has for a long time been, an outstanding figure in the South African sugar field; a pillar of its technical society; a leading debater in every skirmish of its most learned and best developed minds. In his book he shows himself to us in three new and wholly unsuspected roles—those of a gifted writer, a philosopher and a delightful sentimentalist.

Mr. Dymond was in Louisiana at the time of the Sixth Congress of the International Society of Sugarcane Technologists which assembled here in 1938. His visit here, as a delegate to the Congress, was part of a tour he made with his wife and which embraced portions of Europe and of North and South America. His book describes the many interesting places he saw on this tour and includes a chapter on the sugar district of Louisiana and the City of New Orleans, written with delightful appreciation of our good points and an amiable disregard of all the others.

"Catching Cobwebs" is interesting and readable from cover to cover. There are no tiresome chapters, and we think that Homer related the wanderings of Ulysses far less entertainingly, even though he could enthuse over the Island of Calypso and its beautiful nymph, which Mr. Dymond couldn't, or, anyway, decided not to.

From 1940 Annual Report of County Agent

(Sidney J. Bowles, Lafayette Parish)

GOALS SET UP:

100 farmers to follow cultivation recommendations on 5,000 acres cane.

150 farmers to follow variety recommendations on 1,500 acres cane.

10 farmers to plant 100 acres winter legumes on fall plant cane.

250 farmers to rogue out mosaic diseased cane from 250 acres CO-290.

Two fertilizer test plots.

Two variety test fields.

METHODS USED:

a. Carried on 21 method demonstration meetings, mostly on rogueing mosaic disease out of seed plots.

b. Conducted 15 other meetings. Some of these were the seasonal discussion meetings, at which time, cultural recommendations were presented and discussed.

c. Published 5 news stories.

d. Mailed 7 different circular letters.

e. Made 30 farm visits.

f. Received 152 office calls.

g. Received the help of 8 voluntary local leaders—giving about 20 days of their time.

h. Conducted 2 result demonstrations on fertilizer for cane with six meetings at these result demonstrations including visits to the variety test fields.

COOPERATION RECEIVED AND COORDINATION EFFECTED:

As indicated above there were 8 voluntary local leaders who gave about 20 days of their time. These were used largely in the rogueing demonstrations, discussion meetings and in setting up and carrying out the 2 result demonstrations.

The cooperation was very good in most respects. In all cases, the programs were previously discussed and outlined at a meeting of leaders—then carried out through the cooperation of these leaders. It can truthfully be said that if we received the same cooperation in programs of other crops and livestock we would carry on a remarkable piece of Extension work.

The work was closely coordinated with the Experiment Station. Mr. C. B. Gouaux, its representative, was very active and energetic, assisting at many of the meetings and in making plans for the several phases of the program. The F. S. A. workers assisted at some of the meetings and sought to apply these recommendations to their program. The Smith-Hughes Agriculture Teachers also worked closely with the extension agent.

RESULTS ACHIEVED:

475 farmers followed fertilizer recommendations.

190 farmers followed disease control recommendations.

240 farmers were assisted in using timely economic information as a basis for readjusting enterprises.

650 farmers followed variety recommendations.

825 farmers followed recommended cultural practices.

The Effectiveness of Juice Clarifiers in the Removal of Bacteria from Cane Juice in the Sugar Factory

(*C. S. McCleskey, Louisiana State University*)

The sugar manufacturer, more than most food producers, is keenly conscious of the importance of microorganisms in his product. Whether the output of the factory is going into candy making, the baking trades, or into the canning industry, the buyer desires a clean product, as free from bacteria as possible. In the manufacture of raw sugar it is likewise important to produce a product that contains few organisms, for deterioration has been shown by Owen, Kopeloff, and others to be correlated with microbial contamination.

An obvious possible source of bacteria in sugar is the raw material, cane juice, from which it is produced. The exceedingly numerous bacteria of the juice must therefore be eliminated in the process of manufacture.

Several studies concerning the effect of filtration of cane juices on their microbial content have been made in the past. Owen (4) investigated the effect of filtration with vegetable carbons and "Filter-cel" on the number of bacteria in cane juices. Other studies of a somewhat similar nature were made by Kopeloff (2) and by Calvert and Knight (1).

In recent years various types of continuous flow (or mechanical type) juice clarifiers have been introduced into the sugar factory. The efficiency of these new devices, as compared with the older methods of clarification, in regard to reduction of organisms in the juice has received but little attention. Millstein, Tobin, and McCleskey (3) reported an investigation of the number of bacteria occuring at various stages in the production of raw sugar in the experimental sugar factory on the campus of the Louisiana State University. It was noted in this report that the number of bacteria in juice was reduced in the Seip and Dorr clarifiers from several millions, or even several hundred millions, per mililiter, to almost complete sterility. In no case was the number of organisms in the clarified juice more than 11 per mililiter.

During the past season it was possible to obtain some data regarding the reduction of bacteria in a third type of clarifier, the "Acelator" of the International Filter Co. The efficiency of this juice clarifier was not significantly different from the Seip and Dorr so far as the removal of bacteria was concerned. It was again found, as was reported by Millstein, Tobin, and McCleskey, that the clarifier effluent contained a far smaller number of microorganisms than the effluent from the filter press. The results obtained in several tests are indicated in table 1.

TABLE 1. The reduction of bacteria in cane juice by the International clarifier and by the filter press.

Sample	Raw juice	Clarifier effluent			Press juice*		
		Counts made on medium					
		A	B	C	A	B	C
1	approximately	16	4	5	400	500	100
2	200,000,000	17	10	0	------	------	------
3	on all	3	1	2	------	------	------
4	samples	4	3	1	100	200	300
5		4	2	2	------	------	------

Medium A, standard nutrient agar.
Medium B, raw sugar agar.
Medium C, raw juice tryptone agar.
*The material pressed was mud from the International clarifier.

A comparison of the efficiency of bacterial removal by the three clarifiers, the Seip, Dorr, and International, is afforded by the following table. The filter press effluent is again presented for comparison.

TABLE 2. A comparison of the Seip, Dorr, and International Juice clarifiers. Bacteria in raw juice varied from 10,000,000 to 550,000,000 per cc.

Sample	Bacteria in effluent from			
	Seip	Dorr	International	Press
1	11	4	5	100
2	0	0	0	250
3	7	0	2	67
4	3	0	17	3
5	1	9	1	10
6	2	8	2	60,000

The effectiveness of the filter press is of course variable, but it is believed the results reported here are quite normal and indicate clearly what bacterial effiency may be expected in the factory operation of the filter press. Until a good cake is built up in the filter the efficiency would be expected to be low.

It may be concluded on the basis of our experiments that the Seip, Dorr, and International clarifiers are approximately equally effective in the removal of bacteria from the juice. The mechanical clarifiers were considerably more effective than the filter press.

1. Calvert, Robert, and Knight, Alfred. Facts About Sugar, 17: 178. 1923.

2. Kopeloff, Nicholas. Louisiana Planter 64: 14-15. 1920.

3. Millstein, C. H., L. Tobin, and C. S. McCleskey. Sugar Bulletin 19 (5): 5-6. 1940.
The Sugar Journal 3 (9): 13-14. 1941.

4. Owen, Wm. L. International Sugar Journal, 26: 200-207, 245-249. 1924.

Cold Storage Locker Plants

(*By R. M. Crown, Swine & Meat Specialist*)

Unusual interest has recently been shown and many inquiries made concerning cold storage locker plants in Louisiana.

At present we are thinking largely in terms of national defense. The health and general welfare of our rural farm families is our first line of defense. It is to this group that we look for the production of food to supply themselves, our civilian population, and our men in uniforms.

Many rural and semi-rural citizens are workers in our industrial plants on the production end of our defense program. We must improve and protect the health of all if we expect to do a good job of this great program. Statistics show that forty-five million Americans, one third of our population are without adequate diet. This condition is reflected in the reports on the physical examinations of those who have answered the draft or volunteered for military service. About twenty per cent of those reporting have been rejected. Many of these failures are probably due to lack of a proper diet.

It is very surprising to find that there is a higher percentage of the people in the Middle South and Southeast receiving deficient diets than in any other section of the country. We should not resent this fact too greatly but should do all that is within our power to correct this condition. There is no doubt but that on a year round basis the meat portion of the diet has been lacking in our section.

This condition has probably been aggravated by the lack of proper refrigeration facilities. Freezer

locker plants are not new. They have proven successful and beneficial in other sections of the country where weather conditions are far more favorable for curing meats and handling live stock products at home than in our section. Due to uncertain weather conditions, it is not recommended that the farmer attempt to cure his supply of meat at home in Louisiana. There is no section of the country where cold storage facilities are more needed than in the middle South and Southeast.

The establishment of meat curing plants or combined meat curing plants and freezer locker units to serve both the rural and town patrons are being encouraged. This will provide meat curing facilities any time during the year that hogs are available. This will aid in the economical production of the meat supply. The farmer will not be forced to kill and prepare his entire meat supply at one time and be faced with the difficult problem of storing this meat at home for a whole year. He will have the opportunity of having a fresh supply of cured meats at intervals during the year. Through participation in the freezer locker program the farmer will be provided with a continuous supply of fruits, vegetables, especially leafy vegetables, and all kinds of fresh meats, which contain such a large amount of necessary minerals and vitamines. All of these protective foods insure a balanced diet and good health. The near by farms will be the source of supply of products to fill the town patrons lockers. Thus a new year round stable market for quality live stock products and other farm products will be created by this enterprise.

An effort will be made to establish cold storage locker plants in a few of the most ideal locations. Close contact will be kept with these plants to assist them in operating successfully. Other plants will be installed as soon as other communities are ready, and after the initial establishments have proven successful.

The success of a cold storage locker plant depends largely upon the following:

(1) Patrons must be sold or educated concerning freezer lockers.

(2) Quality live stock products and farm produce must be available to supply the plants.

(3) It will operate more successfully in connection with some other farm enterprise as, a meat curing plant, a creamery, etc.

(4) Patrons must have access to the locker plant. School buses, during a large portion of the year, help to solve this problem for many rural homes.

(5) Patrons must be taught to use their locker to the best advantage.

A FEW GENERAL STATEMENTS REGARDING FROZEN FOOD LOCKERS ARE:

A locker will cost the patron a rental fee of ten to twelve dollars per year.

Patrons who produce quality products may pay their rental, and processing fees with products from their farm. This gives the low income group an opportunity to participate. Farmers that have children attending school (via school buses) in towns where a locker plant is located may enjoy fresh fruits, vegetables, and fresh meats without having any refrigeration facilities at home. In many places school buses make a daily stop at the locker plant to give rural children an opportunity to pick up the products their families need.

Even frozen meat taken home one evening will keep to be freshly prepared for the next evening's meal.

The amount of canning on the farm will be greatly reduced by the use of the freezer locker, however, there will always be certain products that may be canned to the best advantage, such as tomatoes, and less tender carcasses of aged animals, etc.

Results of surveys made in communities where freezer locker plants are located show that in no instance have the meat sales of the local butchers been reduced, but due to the fact that the general public has become more meat conscious the volume of meat sales have increased. These figures did not include the additional meat sold in bulk to town locker patrons by the local butcher.

A cold storage locker plant is a sound business enterprise. It operates on a live and let live basis. Business men and town patrons are benefited, and the rural farm folks are given an opportunity to really live more abundantly.

(From St. James Parish Annual Narrative Report of 1940, R. C. Calloway, County Agent)

The measured acreage of sugar cane for sugar for all growers in 1939 was 12,550.3 of which 11,326.8 acres were milled and 1,223.5 acres were used for seed. The total tonnage was 242,410.9 tons and 417,233.6 cwt. The average tonnage per acre was 21.4 tons and 36.83 cwt. per acre. The cane crop of 1940 is about 55% to 60% normal due to the severe freeze in January. The low temperature of 19° which occurred on November 15 caused a further loss in the cane crop. Cane was completely killed; warm weather followed and the cane became sour.

In conducting work on sugar cane, twelve result demonstrations were begun or carried through the year. These result demonstrations involved the use of disease free seed cane, obtained from an area of the state where mosaic disease is not so severe, and commercial fertilizers.

Ten result demonstrations were conducted on ten farms using disease or Mosaic free CO 290 seed. The cane was located in St. Mary's Parish and was inspected by the Assistant Director of the Louisiana Experiment Station, Mr. W. G. Taggart. The cane was found to have less than 1% mosaic. This seed, CO 290, was purchased at sugar cane prices, plus the benefit payment and a loading charge of 25c per ton. The cane was distributed to ten farmers on a like number of plantations. The cane came up in the spring to a very good stand but the crop was very late because of the severe freeze in January. The first rogueing was done on June 10 and rogueing continued on all plots until they were gone over one time. Rogueing of all plots continued through June and July. All plots were gone over at least twice and some as many as three times. Rogueing was very difficult because of the excessive rains through June and July.

At the first rogueing the cane showed about 10% mosaic and at the close of the rogueing period about 1%. Results obtained proved conclusively that mosaic disease can be controlled by rogueing and at a minimum cost per acre.

On one of the above farms four tons of seed cane of the CO 281 variety was selected out of a field of cane which had been rogued the last time in 1937. These four tons of cane were selected as free as possible from mosaic. The cane was planted and at

the first rogueing 20% of the cane was found to be infested. This seed plot was rogued three times. On September 19 a final check was made of this plot and 1% mosaic, by count, was found. This also shows that effective work can be done in the control of mosaic disease. Approximately 15 acres were involved in the above demonstrations with an average yield of 30 tons per acre after diseased canes were removed. This work will be continued on all of the above farms with an addition of six more farms for 1941. About 35 tons more of CO 290 were purchased in St. Mary Parish for next year's work.

Committee Meetings

A joint meeting of the Educational Committee and the Contract Committee of the American Sugar Cane League was held at Baton Rouge, Louisiana, on Friday, March 7, 1941. Those present were:

Educational Committee: Walter Godchaux, Jr., Dave Pipes, C. F. Dahlberg, Frank Barker.

Contract Committee: Stephen C. Munson, Chas. A. O'Brien, F. A. Graugnard, Jr., E. A. Maier, Elliott Jones, B. Thibaut, Horace Nelson.

Houma Experiment Station: Leo P. Hebert, E. V. Abbott, E. M. Summers, R. L. Holmes.

Experiment Station Staff: C. T. Dowell, W. G. Taggart, C. B. Gouaux, E. C. Simon, I. L. Forbes, P. J. Mills, W. J. Luke, C. W. Edgerton, R. L. Grigsby, J. N. Efferson, R. A. Ballinger, B. T. Barr, M. B. Sturgis, C. O. Eddy.

Visitors: H. C. Sanders, J. Dufrenoy, M. J. Voorhies.

After the meeting was called to order by Mr. Munson, Chairman of the Contact Committee, two reports were given by Dr. R. A. Ballinger. The first report was on costs and returns of operating sugar mills in Louisiana for the crop year 1939. This report was based on the records of forty-two sugar mills in Louisiana.

Dr. Ballinger then gave a report on the costs and returns of operating large sugar cane farms in Louisiana for the crop year 1939. This report was based on the record from eighty-eight farms. A comparison was also made in this report for the years 1937, 1938 and 1939.

The afternoon session of the meeting was called to order by Mr. Munson at 1:30 P.M. Mr. Munson announced that Dr. Sturgis had been working on analyses of soils in the sugarcane area and asked him to give a report of his work.

After the discussion of Dr. Sturgis' paper, Mr. Gouaux presented a report on his outfield work for the season of 1940.

Dr. C. O. Eddy gave a report which was prepared by A. L. Dugas on Insecticidal Control of the Sugarcane Borer. Dr. Eddy said that investigations were begun in the fall of 1937, with the particular aim of finding some insecticide which could be safely and economically applied to sugarcane for controlling young borers.

After deciding to have the next meeting at Angola, the meeting was adjourned.

AVERAGE PRICE

The Sugar Quotation Committee of the Cane Products Trade Association has announced the season's average price to be 2.972916

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THE SUGAR BULLETIN

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Washington Notes

(By C. J. Bourg)

Figures on the consumption of sugar in the United States during the last half century make it possible for some very interesting comparisons to be drawn. We present below a set of tables showing the total annual consumption and population of the United States, with the per capital consumption for each of the years in the past five decades. The tables also include figures for 1889 and 1940, which were the last year preceding and the next year succeeding the 50-year period. Your particular attention is invited to the fact that 50 years ago, the people of the United States consumed less than two million tons of sugar, and even at the beginning of the Twentieth Century consumers required only about two and one-half million tons.

Year	Total Sugar Consumption (In Short Tons, Raw Value)	Population	Per Capita Consumption (In Pounds, Raw Value)
1889	1,725,338	61,775,121	55.86
1890	1,824,841	63,056,438	57.88
1891	2,243,884	64,361,124	69.73
1892	2,221,079	65,665,810	67.65
1893	2,283,985	66,970,496	68.21
1894	2,412,036	68,275,182	70.66
1895	2,336,573	69,579,868	67.16
1896	2,324,999	70,884,554	65.60
1897	2,481,860	72,189,240	68.76
1898	2,400,278	73,493,926	65.32
1899	2,490,357	74,798,612	66.59
1900	2,660,264	76,129,408	69.89
1901	2,842,983	77,747,402	73.13
1902	3,075,224	79,365,396	77.50
1903	3,055,492	80,983,390	75.46
1904	3,316,167	82,601,384	80.29
1905	3,154,448	84,219,378	74.91
1906	3,432,233	85,837,372	79.97
1907	3,587,985	87,455,366	82.05
1908	3,817,849	89,073,360	85.72
1909	3,903,980	90,691,354	86.09
1910	4,015,066	92,267,080	87.03
1911	4,016,307	93,682,189	85.74
1912	4,199,412	95,097,298	88.31
1913	4,485,778	96,512,407	92.96
1914	4,506,975	97,927,516	92.05
1915	4,555,755	99,342,625	91.72
1916	4,384,474	100,757,735	87.03
1917	4,414,425	102,172,845	86.41
1918	4,189,134	103,587,955	80.88
1919	4,874,691	105,003,065	92.85
1920	4,895,071	106,543,031	91.89
1921	4,922,222	108,207,853	90.98
1922	6,103,161	109,872,675	111.10
1923	5,729,172	111,537,497	102.73
1924	6,067,040	113,202,319	107.19
1925	6,547,520	114,867,141	114.00
1926	6,838,720	116,531,963	117.37
1927	6,591,200	118,196,785	111.53
1928	6,658,400	119,861,607	111.10
1929	6,835,360	121,526,429	112.49
1930	6,857,760	123,076,685	111.44
1931	6,702,080	124,039,372	108.06
1932	6,438,880	124,839,981	103.15
1933	6,386,481	125,578,068	101.71
1934	6,331,585	126,372,877	100.20
1935	6,623,698	127,249,127	104.11
1936	6,706,113	128,051,868	104.74
1937	6,671,402	128,823,310	103.57
1938	6,643,253	129,823,310	103.57
1939	6,867,533	130,877,763	104.95
1940	6,890,792	131,938,000†	104.46

†Estimated.

THE SUGAR BULLETIN

407 Carondelet St., New Orleans

MARCEL J. VOORHIES, Editor

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The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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Child Labor

As the Sugar Act now provides that any violation of the child-labor provisions prohibits the grower from receiving any payment whatsoever on the sugarcane crop it is very important that extreme carefulness be practiced by each grower to protect himself from having his benefit payment withheld. We are reproducing below for the close attention and the guidance of all sugarcane producers the instructions to Parish Agricultural Conservation Committees regarding proof of age cards for minors employed in sugarcane work in Louisiana and amendment of regulation relating to acceptance of State certificates:

Instructions to Parish Agricultural Conservation Committees Regarding Proof of Age Cards for Minors Employed in Sugarcane Work in Louisiana.

Introduction

A program is being developed in Louisiana with the cooperation of the Children's Bureau of the U. S. Department of Labor and the U. S. Department of Agriculture for making available to growers of sugar cane. Proof of Age Cards for children working in sugar-cane fields. Proof of Age Cards are not mandatory under the terms of the Sugar Act, but the U. S. Department of Agriculture, the agency administering the Act, suggests that growers obtain Proof of Age Cards for children 14 years of age and over in order to protect themselves from unintentional employment of a child under 14.

As you know, the Sugar Act of 1937 provides for conditional payment by the U. S. Department of Agriculture to sugar-cane growers if such growers meet certain conditions in the production of sugar cane with respect to which the payments are to be made. Included among these conditions is the provision that no child under 14 years of age shall be employed or permitted to work on his farm in the production, cultivation, or harvesting of sugar cane, and that no child between the ages of 14 and 16 years of age shall be employed or permitted to do such work more than 8 hours in any one day. This provision applies to every child employed or permitted to do such work on the grower's farm, whether for gain to such child or to any other person, except "A member of the immediate family of a person who was the legal owner of not less than 40 per centum of the crop at the time such work was performed."

Issuance Procedure

The program for making Proof of Age Cards available for children employed to work in the sugar-cane fields calls for the cooperation of local Parish Agricultural Conservation Committees. The Parish Agricultural Conservation Committee will serve as a connecting link between the grower and the U. S. Children's Bureau. The local committee will be furnished with application blanks to be given to growers in need of Proof of Age Cards for minors in their employ.

The growers or their agents will assist children in filling out the application blanks. Some document showing the minor's age, such as a birth certificate, baptismal certificate, Bible record, insurance policy at least one year old, or some other documentary proof of age, must be attached to the application blank. The application blank, with the attached document showing the minor's age, should then be given to the Parish Agricultural Conservation Committee.

The Parish Agricultural Conservation Committee should check the application blank carefully to be sure that each item has been filled in. He should also be sure that some documentary proof of the minor's age accompanies the application blank. He should then mail the application blank and the documentary proof of the child's age immediately to Mrs. Ethel Ruck, Bureau of Vital Statistics, Civil Court Building, New Orleans, La.

If the evidence of age is adequate, the U. S. Children's Bureau will issue a Proof of Age Card and will mail the card directly to the grower and notify the minor.

CHILDREN'S BUREAU

Amendment of Regulation Relating to Acceptance of State Certificates

(*Excerpt from Federal Register, March 28, 1941*)

By virtue of and pursuant to the authority conferred by section 3 (1) of the Fair Labor Standards Act of 1938 (Act of June 25, 1938, c.676, 52 Stat. 1060, U. S. Code, ti. 29, sec. 201), 29 CFR §402.1 is hereby amended effective April 15, 1941, for the purpose of designating Louisiana as a State in which State age, employment or working certificates or permits shall have the same force and effect as Federal certificates of age under the Fair Labor Standards Act of 1938, so that said section shall read as follows:

§ 402.1 Designation of States. Pursuant to the provisions of § 402.5, I hereby designate the following

States as States in which State age, employment, or working certificates or permits shall have the same force and effect as Federal certificates of age under the Fair Labor Standards Act of 1938:

Alabama	Louisiana	Ohio
Arizona	Maine	Oklahoma
Arkansas	Maryland	Oregon
California	Massachusetts	Pennsylvania
Colorado	Michigan	Puerto Rico
Connecticut	Minnesota	Rhode Island
Delaware	Missouri	South Dakota
District of Columbia	Montana	Tennessee
Florida	Nebraska	Utah
Georgia	New Hampshire	Vermont
Hawaii	New Jersey	Virginia
Illinois	New Mexico	Washington
Indiana	New York	West Virginia
Kentucky.	North Carolina	Wisconsin
Iowa	North Dakota	Wyoming
Kansas		

This designation shall be effective from July 1, 1940, until June 30, 1941, unless amended or repealed by regulation hereafter made and published by the Chief of the Children's Bureau.

Katherine F. Lenroot,
Chief, Children's Bureau.

Sugar Consumption Estimate Increased

The Sugar Division of the Agricultural Adjustment Administration on March 19th, announced an increase in the estimate of consumers' requirements of sugar for the calender year 1941 from an initial estimate of 6,616,817 short tons, raw value, announced December 7, 1940, to 6,851,889 tons, an increase of 235,072 tons.

The Sugar Act of 1937 directs the Secretary to make an initial determination of consumers' requirements in December for the following calendar year and to make any necessary adjustments in this initial determination during the year. The present revision, like that of February 23, 1940, has been made following the receipt of complete official data on stocks, distribution and other factors for the calendar year 1940. According to data just published, stocks in the hands of manufacturers, wholesalers, and retailers at the end of 1940 were approximately 125,000 tons above normal. The revised consumption estimate, which makes allowance for the excess stocks mentioned, and for changes in demand conditions and other factors specified in the law, is approximately equal to the amount of sugar distributed during the calendar years 1939 and 1940, or 6,867,533 and 6,890,792 tons, respectively.

The quotas for the various sugar-producing areas under the revised figures compare with the former quotas as follows:

	Revised Determination (short tons,	Initial Determination raw value)
Domestic Beet	1,589,100	1,549,898
Mainland Cane	430,794	420,167
Hawaii	961,764	938,037
Puerto Rico	818,166	797,982
Virgin Islands	9,141	8,916
Commonwealth of the Philippines	1,055,895	1,006,931
Cuba	1,959,947	1,869,060
Foreign Countries other than Cuba	27,082	25,826
	6,851,889	6,616,817

There is an explanation needed in connection with the March 19th increase in the sugar consumption estimate for 1941.

First, let us remind you that when the consumption estimate is below 6,682,670 short tons, raw value, the minimum quotas for the domestic areas apply, and no domestic quota can be further reduced. Therefore, it is also true that when the estimate of consumption is below 6,682,670 tons, all reductions come out of Cuba and other foreign countries; and, in the case of the Philippines, reductions can be made but not below the duty-free limitation of the Independence Act, which works out to 982,000 short tons, raw value.

The initial determination of consumption requirements for 1941 was 6,616,817 tons. Consequently, the increases up to 6,682,670 tons were first allocated to Cuba and other foreign countries, and the Philippines, on the basis explained above. Afterwards, the increases from 6,682,670 tons to the revised determination of 6,851,889 tons were distributed pro rata among all areas, domestic and foreign.

Without going into the details of computation, this explanation is offered because of questions which have been raised as to why the increases for Cuba and the Philippines were so much greater than the increases for domestic areas.

Sugar Division Issues Data on "Invisible" Sugar Stocks

In view of the fact that the official estimate of consumption for 1941 has been twice revised since January 1st by the Secretary of Agriculture, the statistics on the invisible sugar stocks in the United States command the attention of producers and consumers alike. The possibilities of later revisions in the consumption estimate may be determined by the extent to which there is actual distribution of these invisible stocks of sugar to the ultimate consumers:

"The Sugar Division of the Agricultural Adjustment Administration on March 13th issued its summary of data on 'invisible' supplies of sugar in the United States for the fourth quarter of 1940, together with a record of receipts and deliveries. The last quarterly report of the Sugar Division was issued December 12, 1940, and covered the third quarter of 1940. The data for the fourth quarter report were obtained from schedules received from 1,295 manufacturers, wholesalers and retailers.

"The following table summarizes the data:

Stocks of Sugar Held by 1,295 Manufacturers, Wholesalers and Retailers on Sepecified Dates, Together with Receipts and Deliveries of Sugar 4th Quarter 1940.*

	No. of Firms Reporting	Stocks Sept. 30 1940	Receipts Oct. 1 Dec. 31 1940	Deliveries or use Oct. 1 Dec. 31, 1940	Stocks Dec. 31 1940
Total	1,295	372,320	726,815	708,650	390,485▲
Comparable data for 4th quarter, 1939	1,391	348,454	635,979	666,493	317,940♦
Comparable data for 4th quarter, 1938	1,387	241,231	730,873	674,716	297,388

*The fourth quarter receipts by the firms reporting for this period on Form SS-33 were approximately 43.8 per cent of the total deliveries of sugar by refiners, processors, and importers for the period Oct. 1 to Dec. 31, 1940. The 1940 receipts of sugar by the reporting firms were approximately 3,042,000 short tons, or 47.0 per cent of the total 1940 deliveries of sugar.

▲Does not include sugar in transit, amounting to 34,227 tons, on December 31, 1940. This is the first time complete data on such sugar are being reported. The December 31, 1939, stocks of the 1,295 firms were 307,291 tons, excluding any sugar in transit to these firms.

♦Does not include any sugar in transit to these firms on December 31, 1939. As of that date there was a known quantity of approximately 40,000 tons, representing an unusual transaction, in transit between the Pacific and Atlantic seaboards to these firms."

Season's Average Price Sugar Cane

The season's average price per cwt of sugar of $2.972916 was published on page 55 of the Bulletin of April 1, 1941. Since that time the Sugar Division has determined the price of standard sugarcane to be $2.785 per ton.

Results of Experiments With Chlorotic Streak in 1940

*By E. V. Abbott, Division of Sugar Plant Investigations, Bureau of Plant Industry. United States Department of Agriculture.**

During 1940, field experiments were conducted in Louisiana for the purpose of determining the effect of chlorotic streak on germination and yields of cane, the extent of spread of the disease in commercial, test fields, and parent cane varieties, and the effectiveness of roguing seed cane plots as a means of controlling the disease. The results of these experiments should be of timely interests to growers at the beginning of another season when means of preventing the further increase of the disease should be considered.

Effect of the Disease on Germination and Yields

The results of preliminary experiments, which indicated that chlorotic streak might cause important reductions in yields of C. P. 28/19 and 29/320, were reported previously.† During 1940, a larger scale test was conducted with these 2 varieties on Raceland Plantation, through the cooperation of Godchaux Sugars, Inc. Plots 1/110 acres in size of healthy and diseased seed of both varieties were planted in light soil in late September 1939, with 10 replications of both healthy and diseased cane of each variety. Three hundred apparently sound eyes were planted in each plot. The germination was determined after the stand was established in May, and on November 21, 1940, the cane was cut and weighed, and a 10-stalk sample taken for chemical analysis from each plot. The results are presented in table 1.

TABLE 1. Effect of chlorotic streak on germination and yields of cane and Sugar per acre of C. P. 28/19 and C. P. 29/320 on light soil, Raceland Plantation, 1940.

Variety	Germination			Tons of Cane per Acre			Lbs. of Sugar per Acre		
	Healthy	C. S.	Reduction by C. S.	Healthy	C. S.	Reduction by C. S.	Healthy	C. S.	Reduction by C. S.
	%	%	%			%			%
C.P. 28/19	30.2	28.9	4.3	19.8	19.6	1.0	4034	3671	9.0
C.P.29/320	30.0	20.7	31.0	22.7	19.0	16.3	4433	3266	26.3

On the basis of the results in this table, the disease appears to be considerably more important on C. P. 29/320 than on C. P. 28/19. The reductions in yields of cane and sugar for the former variety were such as to show its value would be greatly impaired if chlorotic streak should reach a high level of infection in it over large areas. For both varieties, the percentage reductions in yields of cane per acre were somewhat less than the corresponding reductions in germination. This bears out the results obtained in previous years showing that many diseased stools eventually sucker nearly as much as the healthy ones, thus compensating to some extent for the reduced germination. The sucrose analysis of diseased cane of both varieties, however, was 1.1 points below that of the corresponding healthy cane, indicating that the later suckering of the diseased stools resulted in delayed maturity. The reduction in yields of sugar per acre for both varieties were thus considerably greater than those of cane per acre.

This test is being continued as first stubble in 1941, and in addition, a new plant cane test with the same varieties has been planted at Raceland, and one with C. P. 807 and C. P. 29/320 at Montegut, in cooperation with the South Coast Co.

Studies of Secondary Spread

Secondary spread refers to the transfer of the disease by natural means from diseased plants that have grown from diseased seed pieces, to plants that were healthy at germination. Studies of secondary spread of chlorotic streak in plantation fields during 1940, principally C. P. 29/320 plant cane, showed that there was a marked difference in the rate of spread in different localities. In order to determine the extent of spread, the stools showing the disease in replicated plots in several fields were marked with stakes in May, and a record was kept of the new diseased stools appearing during the summer and fall. Some of the new cases recorded after May may have resulted from the late appearance of leaf symptoms in originally diseased plants, but it is improvable that this accounted for much of the increase in infection that was noted.

Near Napoleonville and Raceland the disease increased from 1 to 3 fold during the summer months, while at several other localities, among them Montegut, Franklin and Jeanerette, little secondary spread was detected. It is possible that greater spread than was indicated by the fall records will be found to have occurred when the same fields are examined in the spring of 1941, since it is known that some plants may become infected as plant cane but not show the disease until the following year.

Varietal Resistance Tests

Through the cooperation of Godchaux Sugars, Inc., and the South Coast Co., it was possible to plant 2 tests in the fall of 1939, designed to determine the extent of spread that would occur into the principal unreleased test field varieties and the important parent varieties being used by the cane breeder, when subjected to heavy exposure to the disease. Replicated plots of the seedlings and parent varieties, planted with hot-water-treated seed, were interplanted with plots of diseased C. P. 29/320, with about every third plot being diseased. The number of diseased stools appearing in the plots from hot-water-treated seed was determined at regular intervals during the growing season.

So far as could be determined by the final fall counts, extent of spread into any of the varieties in the test was not great enough to permit of a definite classification of them on the basis of susceptibility to infection, but it is anticipated that more definite information will be obtained from the stubbles in 1941. It may be mentioned, however, that spread of C. P. 34/77 and C. P. 34/79 was greater than to C. P. 29/320, growing under comparable conditions. C. P. 33/243 and C. P. 34/120 also became infected, but to a lesser extent than the C. P. 29/320.

One stool of Co. 290 became diseased in this test, the first time chlorotic streak has been found on it in Louisiana, although the disease has been reported in low percentage on this variety in Queensland, Australia.

Roguing as a Means of Control

The encouraging results obtained from roguing seed

*The writer is indebted to Robert L. Tippett for assistance in conducting the experiments discussed in this article

†Abbott, E. V. A progress report on the study of chlorotic streak of sugarcane in Louisiana. Sugar Bulletin 18(19):3-6, 1940.

plots for chlorotic streak control were discussed in a previous article.* Roguing was carried out commercially on a larger scale in 1940 on several plantations. While the success of these efforts can not be determined until the spring of 1941, counts made in several rogued fields in the fall of 1940 prior to their being cut for seed indicated that there was only a fraction of 1 percent infection, even on plantations where secondary spread in unrogued fields had been quite rapid.

The results obtained thus far with roguing for chlorotic streak indicate that this disease may be controlled by such means more easily than mosaic. It is possible, of course, that the past few seasons have not been favorable for maximum spread of the disease, and that in some seasons roguing would be less successful than it has been in the past. Experiments have shown that where roguing is to be undertaken it is desirable to select fields with not more than 5 percent initial infection. Where the initial infection was as high as 10-15 percent, the results of experiments during the past 2 seasons indicated that roguing counteracted secondary spread, i.e., the percentage of infection remained about the same throughout the season, but little headway was made in reducing it below the initial figure.

Present Importance of the Disease

Since chlorotic streak has now been found in 12 of the 18 important sugarcane-growing parishes of the State, and in each of the northern, western and southeastern portions of the sugar district, it seems that the disease must be looked upon as having become rather permanently established here. In only 2 or 3 localities, however, so far as is known, has the infection ever been great enough to have any material effect on yields of cane, so that up to the present time it does not appear that the disease has caused serious monetary loss to the industry from reduced tonnages. Nevertheless, it has added to planting costs on some plantations through the necessity of obtaining disease-free seed, and is resulting in a tendency on the part of some growers to reduce their acreages of C. P. 29/320, or to discontinue this variety altogether. In the southeastern and western parishes, particularly the latter, substitution of other varieties for C. P. 29/320 could be done with less difficulty than in the northern parishes, where it is the leading variety.*

In some instances, C. P. 29/103 has been used to replace C. P. 29/320, a change of doubtful value so far as chlorotic streak control is concerned. Preliminary data indicate that the disease may be more of a problem in the former than in the latter variety, both with respect to the rate of secondary spread and the effect on germination and yields. The same may be said of C. P. 29/120, a variety somewhat less favored by growers than C. P. 29/103.

Even though the disease at present may not be causing serious loss to the industry as a whole, its potentialities for doing so should not be overlooked, nor efforts toward its control relaxed. There is no assurance that the past 4 seasons during which it has been under observation in the State represent conditions of maximum secondary spread. It is therefore important to continue the work of reducing the extent of infection wherever the disease occurs. Encouraging progress has been made in this direction by growers who have practiced roguing and seed selection, accompanied by the destruction of fields of diseased stubbles, and this program should be followed on all farms having the disease. Hot-water treatment of seed cane is effective for control of chlorotic streak and may have other benefits, which are now being determined by experiments on a commercial scale. Concerted action in communities where the disease occurs is important, for the failure of one grower to control the disease may largely nullify the efforts of his neighbors.

*Rands, R. D., Abbott, E. V., and Summers, E. M. Disease resistance tests and seedling selections in 1938 and 1939. Sugar Bulletin 18(15):5-9, 1940.

Minimum Wages for California Beet Workers Announced By Sugar Division

(Washington, D. C., February 10, 1941)

The Sugar Division of the Agricultural Adjustment Administration today announced the minimum rates to be paid laborers in the production, cultivation, or harvesting of the 1941 crop of sugar beets in California by producers who apply for conditional payments under the Sugar Act of 1937. The rates for workers in the other sugar beet producing states, where the season starts much later than in California, will be announced in the near future.

The Sugar Act requires, as one of the conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugar beets be paid in full for such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable, after public hearing and investigation. The public hearings were held at Los Angeles and Sacramento in October, 1940.

The basic wage rates payable by most producers in 1941 are the same as those established in 1940. However, while in 1940 the piece rate for harvesting operations remained unchanged after sugar beet yields reached 20 tons per acre, the rate this year will be reduced 1 cent per ton for each additional ton between 21 and 25 tons, after which no further reductions will be made.

Another change from 1940 provides that a producer and laborer may agree in writing that the laborer is to receive the sum of the piece-rate payments specified for blocking and thinning and first and second hoeings, regardless of the number of hoeings actually required.

The determination also provides as in former years that producers are to furnish laborers without charge the accessories customarily furnished by them, such as a house, garden plot, and similar incidentals.

The wage rates follow:

Southern California

(Applicable to farms located in the following counties: Imperial, Santa Barbara, San Diego, San Luis, Obispo, Orange, Kern, Riverside, Kings, San Bernardino, Tulare, Los Angeles, Fresno, Ventura, Madera.)

Blocking and Thinning: Either $6.50 per acre on a piece work basis or 35 cents per hour on a time basis.

First Hoeing: Either $1.50 per acre on a piece work basis or 30 cents per hour on a time basis.

Second and subsequent Hoeings: Either $1.00 per acre for each hoeing on a piece work basis or 30 cents per hour on a time basis.

Topping and Loading: On a time basis 40 cents per hour. On a piece work basis:

Net tons per acre	Rate per ton	Net tons per acre	Rate per ton
Below 5	$1.93	13	$0.91
5	1.63	14	.86
6	1.48	15	.82
7	1.33	16	.78
8	1.23	17	.75
9	1.15	18	.72
10	1.08	19	.70
11	1.02	20	.69
12	.96	21	.68
		22	.67
		23	.66
		24	.65
		25 or above	.64

(The rate for all fractional tonnages between 5 and 25 tons rounded to the nearest tenth of a ton is to be in proportion within each interval).

Northern California

(Applicable to all farms, except those specified as in Southern California, the sugar beets from which are delivered to factories located in California.)

Blocking and Thinning: Either $7.50 per acre on a piece work basis or 40 cents per hour on a time basis.

First Hoeing: Either $2.00 per acre on a piece work basis or 35 cents per hour on a time basis.

Second and subsequent Hoeings: Either $1.50 per acre for each hoeing on a piece work basis or 35 cents per hour on a time basis.

Topping and Loading: On a time basis 45 cents per hour. On a piece work basis:

Net tons per acre	Rate per ton	Net tons per acre	Rate per ton
Below 5	$2.28	13	$1.01
5	1.98	14	.96
6	1.68	15	.92
7	1.43	16	.88
8	1.33	17	.85
9	1.25	18	.82
10	1.18	19	.80
11	1.12	20	.79
12	1.06	21	.78
		22	.77
		23	.76
		24	.75
		25 or above	.74

(The rate for all fractional tonnages between 5 and 25 tons rounded to the nearest tenth of a ton is to be in proportion within each interval).

1941 Minimum Sugar Beet Wage Rates Announced By Sugar Division

(Washington, D. C., March 19, 1941)

The Sugar Division of the Agricultural Adjustment Administration today announced the minimum rates to be paid laborers in the production, cultivation, or harvesting of the 1941 sugar beet crop by producers in the continental sugar beet area (except California) who apply for payments under the Sugar Act of 1937. California minimum wage rates were announced February 10, 1941, because of the early planting season in that State.

The Sugar Act requires, as one of the conditions of payment to growers, that all persons employed on a farm in the production, cultivation, or harvesting of sugar beets be paid in full for such work at rates not less than those determined by the Secretary of Agriculture to be fair and reasonable, after investigation and public hearing. Public hearings were held in Detroit, Michigan; St. Paul, Minnesota; Billings, Montana; Salt Lake City, Utah; and Denver, Colorado, in December.

The 1941 wage determination makes only two changes from that issued in 1940. One of these changes has been to include Kansas, which was formerly a separate district, in the district comprising Colorado, Nebraska, South Dakota, and Southern Wyoming. The effect of this change is to increase the rate for each hoeing in Kansas by 50 cents per acre. The second change is to provide hourly as well as piece rates for the districts comprising Ohio, Michigan, Indiana, Wisconsin, Colorado, Nebraska, South Dakota, Southern Wyoming, and Kansas.

The rates to be paid by producers whose sugar beets are contracted for delivery to sugar factories in each of the districts are as follows:

District I.—Ohio, Michigan, Indiana, and Wisconsin:

Blocking, thinning, and hoeing: $11.00 per acre, or 40 cents per hour for blocking and thinning, and 35 cents per hour for hoeing.

Topping: On a time basis, 45 cents per hour. On a piece work basis as follows:

Net tons per acre	Rate per ton	Net tons per acre	Rate per ton
3 or below	$1.50	10	$ .91
4	1.30	11	.89
5	1.15	12	.87
6	1.06	13	.85
7	1.00	14	.83
8	.96	15	.81
9	.93	16 or above	.80

(The rate for all fractional tonnages between 3 and 16 tons rounded to the nearest tenth of a ton is to be in proportion within each interval.)

District II.—Minnesota and Iowa:

Blocking, thinning, and hoeing: "Old method" or "hill drop" fields, $12.00 per acre. "Blocked" fields, $10.50 per acre. "Cross cultivated" fields, $9.50 per acre. Topping: 90c for each ton up to and including 7 tons per acre plus 80c for each ton per acre above 7 tons, with a minimum of $5.40 per acre.

District III.—Nebraska, Colorado, Kansas, Southern Wyoming, and South Dakota:

Blocking and thinning: $8.00 per acre or 40 cents per hour. First hoeing: $2.50 per acre, or 35 cents per hour. Second and each sebsequent hoeing or weeding: $1.50 per acre, or 35 cents per hour. Topping: 80 cents for each ton up to and including 12 tons per acre plus 70 cents for each ton per acre above 12 tons, or 45 cents per hour.

District IV.—Southern and Eastern Montana, and Northern Wyoming:

Blocking and thinning: $9.50 per acre. First hoeing: $2.50 per acre. Second and each subsequent hoeing or weeding: $1.50 per acre. Topping: 80 cents for each ton up to and including 12 tons per acre plus 70 cents for each ton per acre above 12 tons.

District V.—Western Montana:

Blocking and thinning: $8.50 per acre. First hoeing: $3.00 per acre. Second and each subsequent hoeing or weeding: $2.00 per acre. Topping: 80 cents for each ton up to and including 12 tons per acre plus 70 cents for each ton per acre above 12 tons.

District VI.—Northern Montana:

Blocking and thinning: $8.50 per acre. First hoeing: $3.00 per acre. Second and each subsequent hoeing or weeding: $2.00 per acre. Topping and loading: 95 cents for each ton up to and including 12 tons per acre plus 85 cents for each ton per acre above 12 tons.

District VII.—Utah, Idaho, and Oregon:

Blocking and thinning: $8.00 per acre, or 40 cents per hour. First hoeing: $2.00 per acre, or 35 cents per hour. Second and each subsequent hoeing or weeding: $1.00 per acre, or 35 cents per hour.

Topping and loading: On a time basis, 45 cents per hour. On a piece-work basis:

Net tons per acre	Rate per ton	Net tons per acre	Rate per ton
6 or below	$1.30	13	$ .94
7	1.23	14	.91
8	1.16	15	.89
9	1.10	16	.87
10	1.05	17	.86
11	1.01	18 or above	.85
12	.97		

When topping and loading are performed by different persons, 30 percent of the above rates is to be paid for loading.

(The rate for all fractional tonnages between 6 and 18 tons rounded to the nearest tenth of a ton is to be in proportion within each interval).

District VIII.—Washington:

Blocking and thinning: $7.50 per acre, or 40 cents per hour. First hoeing: $2.00 per acre, or 35 cents per hour. Second and each subsequent hoeing or weeding: $1.50 per acre, or 35 cents per hour. Topping: 70 cents per ton, or 45 cents per hour. Loading: 30 cents per ton, or 45 cents per hour.

If growers in districts for which only piece rates are specified wish to employ labor on other than a piece rate basis, or if the use of special machine methods of planting, cultivation, or harvesting reduce the amount of labor required as compared with the common method in use, the minimum wage rate is to be that agreed upon between the producer and the laborer. However, in both cases the rate must be approved by the State AAA committee as being equivalent to the piece rate specified for such work in the determination.

The determination also provides that a producer and laborer may agree in writing that the laborer is to receive the sum of the piece rate payments specified for blocking and thinning, and first and second hoeings, regardless of the number of hoeings actually required.

When wage rates higher than the foregoing are agreed upon between growers and laborers the payment of such rates is required.

The determination further provides that the producer is to furnish to the laborer, without charge, the accessories customarily supplied by him, such as a house, garden plot, and similar incidentals.

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Ponderings on Sugar

(By C. J. Bourg)

There are some people who have a feeling that sugar quotas will be suspended before the end of the year. Present conditions do not justify such a forecast, although war can change any situation. Government officials have lately reminded the public and the sugar industry that the President has the power to suspend quotas, and perhaps that suggestion has been father to the thought that a suspension is to be expected.

It is now perfectly clear that an emergency situation, such as a sudden price rise and demand hysteria, can be successfully overcome by increasing the supply of sugar through a higher estimate of consumption (or several) to raise quotas. The suspension in 1939 was sudden, drastic, and caused a dislocation in the sugar market under which all areas suffered throughout the year 1940.

A more gradual price rise occurred in the first 3 months of 1941, and the situation was rather successfully met by increases in the supply of sugar. The cause of the increase in price was almost entirely due to tremendous rises in freight rates; but, as usual, there was evidence of intemperate buying against higher prices. The upward trend of the price of sugar was halted before the price became excessive from the standpoint of the consumers and to the industry. There was no suspension of quotas, although there were forceful and effective reminders that suspension might be restored to if larger supplies and re-assurances from the Government failed to have the desired stabilization.

During the month of March, deliveries of sugar for consumption are reported by the Department of Agriculture to have reached 1,029,000 tons, as compared to 460,000 tons in March 1940. The only examples of so great a volume of deliveries within one month have been under similar circumstances of an inflated demand or an extreme desire to market hurriedly to avoid a tax or cash losses.

We discuss approvingly the evident inclination towards a policy to avoid sudden drastic decisions which disrupt the market and which have bought into the market too great an element of speculation. It is obviously to the advantage of the producer and distributor of sugar that there should not occur a sudden, unexpected rise in price, any more than an equally sudden and unexpected drop in pricce.

We do not advocate any policy which will permit the price of sugar to become excessive, because we recognize in the long run the industry can be as badly hurt from a runaway price as from a depressed price, even below cost. We do advocate that during emergencies such as are likely to occur when there are general war conditions in the world, even though the United States may not be directly involved, the wisest and most benefical course for the industry is that the use of the discretionary powers granted to the President and to the Secretary of Agriculture be so administered as to give to the producer and distributor of sugar a reasonable opportunity to make adjustments to conform to changes in price and supply and demand conditions. Advance notice of the exact action contemplated cannot normally be given; but, the developments in the sugar market and the administrative action which were taken in the first quarter of 1941 have demonstrated the value of the practical application of a gradual adjustment, including warnings as to more drastic action which may follow, if the emergency circumstances of the moment have not been relieved. Twice already this year, the estimate of consumption has been increased, and the price has practically been kept at reasonable levels under the abnormal conditions. We anticipate that there will most probably be another in-

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crease in the estimate of consumption, due to the fact that the deliveries of sugar in the first quarter of 1941 have been greatly in excess of normal and the prospects for a record consumption in the United States are admittedly good. Therefore, we submit that as long as the United States remains at peace, there is no presently-known reason for a suspension of quotas or the opening of our ports to unlimited importations of foreign sugars. There are ample supplies of sugar available, and their availability can be successfully insured by the medium of increased quotas and the re-allocation of deficits from offshore areas.

***

When announcing the mimum-price "program of plenty" in connection with corn-hogs, dairy and poultry products, the Secretary of Agriculture made a declaration of policy in which the following sentence appears: "It is only common sense to produce more of the commodities we need and to hold down on the production of commodities we don't need and aren't likely to need." Needless to say, we agree thoroughly with this clear-cut statement; however, it does not help us understand the following press release issued several days later, in view of the fact that the acreage in the domestic beet sugar area has been curtailed an average of 16.9% in 1941, and the acreage in the mainland cane area has been curtailed an average of 9.25% in 1941, after two previous years of curtailments up to 40%:

"The Sugar Division of the Department of Agriculture today (April 19, 1941) announced that 1941 domestic sugar beet and sugarcane production allotments previously established would remain unchanged. It was explained that in view of developments in the international situation and in the sugar market during recent months officials had been considering the advisability of increasing 1941 production allotments, but, because of the availability of large reserve stocks in some of the domestic areas, as well as in nearby *foreign areas*, it had been decided to maintain the allotments at their present level.

"Payments are made to domestic sugar producers under the Sugar Act of 1937 who comply with their production allotment and who meet certain other conditions. A production allotment is known under the Sugar Act as a "proportionate share" because it represents a grower's proportionate share of the quantity of sugar needed by his area to fill its sugar marketing quota and provide normal reserves. The other conditions for payment are nonemployment of child labor, payment of fair wages to field laborers, soil conservation, and, in the case of growers who are also processors, payment of fair prices for sugar beets or sugarcane bought from other growers.

***

The tables on population, supplies and per-capita consumption, which appeared in the April 1st issue of the Sugar Bulletin, have inspired several complimentary communications, indicating that the information revealed by the statistics has been appreciated. In acknowledgment it is appropriate to state that the figures used were taken from or based upon statistics published by Lamborn's Sugar Market Report, whose figures have been accepted as the basis for Agricultural Statistics of the Department of Agriculture.

Louisiana Sugar Industry Organizes to Cooperate With Louisiana Department of Conservation to Attack Water Pollution Problem

At the request of the Industrial Committee of the American Sugar Cane League, President Giles called a meeting of all Louisiana processors for 1:30 P. M., April 24, 1941, at the County Agent's Building at Thibodaux. The purpose of the meeting was to discuss organization of the industry to cooperate with the Department of Conservation to correct the water pollution problem of the sugar industry. Mr. J. J. Munson, Chairman of the Industrial Committee, was unavoidably away and he delegated Mr. E. W. McNeil to preside in his absence .

After President Giles called the meeting to order, it was turned over to Mr. McNeil who in turn introduced Mr. F. F. Chisholm, Director, Division of Research & Statistics of the Louisiana Department of Conservation. Mr. Chisholm outlined the stream pollution problem of the Louisiana sugar industry and in the course of his remarks stated that it was impossible to give a formula for the basis of determining the pollution problem of all mills. He suggested that organization be effected to study the problems and to cooperate with the Conservation Department and he assured the industry that the Department of Conservation was imbued with the idea of cooperation rather than control.

A motion was made by Mr. Frank L. Barker and seconded by Mr. Chas. A. Farwell that the groups of mills suggested by Chairman Munson formally organize and select five representatives, each group to

serve as a permanent committee, and that each of the five representatives in turn select two technicians to serve as a contract committee under the chairmanship of Mr. J. J. Munson, and that Mr. Marcel J. Voorhies serve as secretary. This motion was unanimously carried.

During a short recess, the groups organized as follows: Group No. 1—Mississippi River.

Reserve	San Francisco	Helvetia
Golden Gate	Longwood	Audubon
Pelican	Alma	Smithfield
Allendale	Catherine	Westover
Polar Grove	Slack's	Cinclare
Myrtle Grove	St .Louis	Tally-Ho
Catherine (Supple)	Cedar Grove	Cora-Texas
Salsburg	Armant	Laura
Golden Ridge	Columbia	Waterford.

Group No. 1 selected its permanent committee composed of Mr. E. W. McNeil as Chairman, Mr. R. M. Murphy, Mr. J. W. Supple, Mr. Walter Godchaux, Jr. and Mr. C. J. Tucker. This group selected Mr. E. W. McNeil and Mr. R. M. Murphy as its technicians.

Group No. 2—Bayou Lafourche

Evan Hall	Glenwood	Star
Westfield	Georgia	Little Texas
Supreme	(Blanchard)	Cedar Grove
Laurel Grove	Greenwood	Leighton
Georgia (So. Coast)	Raceland	Valentine
Southdown	Terrebonne	Ellendale.
Lula	Magnolia	

Group No. 2 selected its permanent committee as follows: Mr. J. T. Landry, Chairman, Mr. Elliott Jones, Mr. Horace Nelson, Mr. Roland Caldwell and Mr. C. Stewart Churchill. This group selected as its technicians Mr. A. J. Isaac and Mr. Roland Caldwell.

Group No. 3—Bayou Teche

Shadyside	Maryland	Columbia
Sterling	Oaklawn	Right Way
Cypremort	Delgado-Albania	Loisel
Duhe & Bourgeois	Enterprise	Billeaud
Orange Grove	Oasis	Vermilion
Youngsville	Milton	Iberia
Erath	Vida	Ruth
Evangeline	St. John	Augusta
Breaux Bridge	Forest Home	Meeker.
Pearce	Alice C.	

Group No. 3 selected its permanent committee as follows: Mr. A. J. Keller, Chairman, Mr. M. V. Yarbrough, Mr. Caffery Palfrey, Mr. H. H. Littell and Mr. G. L. Pace. This group selected as its technicians Mr. A. J. Keller and Mr. Caffery Palfrey, and also selected as an alternate Mr. G. L. Pace.

Following the recess, the three groups reported to the meeting.

It was suggested that the chairman of each of the three groups arrange to meet with all of the mills in their group and also arrange to have Mr. Chisholm or members of his staff meet with them.

Mr. Chisholm introducted to the group two of his staff members, Mr. C. L. Davis, Senior Chemical Engineer, and Mr. Louis Cusachs, Chemical Engineer.

It was moved by Mr. R. H. Chadwick and seconded by Mr. W. C. Kemper that Mr. Chisholm and his staff be thanked for their cooperation and for their attendance and help at this meeting. This motion was passed unanimously.

What Are the Possibilites of Commercial Production of Beet Sugar in Louisiana?

In July, 1940, there were twenty acres of land on the Westover Plantation planted in sugar beets. The seeds used for this planting were of a Southern European strain.

The land on which this planting was made is sandy soil but the planting was made following two crops of sugar cane, without any legume crop in between. The beets were not thinned or blocked and were only given one cultivation sometime during the fall of 1940. No fertilizer of any kind was used on this plot.

The beets were harvested during the months of March and April, 1941. The indicated yield per acre was aproximately twelve tons.

The juice was first analyzed by the Audubon Sugar School at Louisiana State University on March 11, 1941, with the following result:

Sucrose in beets by hot digestion Cossettes....20.1%
Pressed Juice Analyses:

Brix	23.3
Sucrose	20.93
Purity	89.90.

The Audubon Sugar Factory had the following to say about these beets: "In a normal beet sugar factory, that does not employ Stefans process, the yield of sugar from these beets should be three hundred and fifty-five pounds per ton (in the bag)."

A second sample of these beets was analyzed on April 3, 1941, with the following result:

Sucrose in beets by hot digestion Cossettes....19.2%
Pressed Juice Analyses:

Brix	24.9
Sucrose	21.07
Purity	88.70.

These analyses, as will be noted, were not as favorable as those run on March 11, 1941, indicating

that the beets had, by April 3, 1941, passed their maximum maturity. In commenting on this, the Audubon Sugar Factory had the following to say: "Regardless of the deterioration in the analyses, the beets were still very high in sugar content and we had some of the juice clarified and it is a pleasure to advise that the juice clarified beautifully."

We realize that this experiment should not be taken as conclusive proof that beet sugar can be commercially produced in Louisiana and we are simply reporting the experiment to you as a matter of interest. However, attention must be called to certain outstanding facts:

1. The year 1940 was considered a poor year for all agricultural crops in the region in which this experiment was made.

2. These beets were given all of the "bad breaks", agriculturally speaking, in that they followed two very heavy crops of sugar cane, the soil was not properly prepared for planting, and no fertilizer of any kind was used. In addition to this, these beets had to fight their way to maturity with only one cultivation and with no blocking or thinning. In spite of all of this, the beets gave an indicated yield of approximately twelve tons to the acre and an indicated yield of sugar of approximately three hundred and fifty pounds to the ton. This can be compared to the national average of the beet area over a period of years of approximately eleven tons to the acre, and three hundred pounds of sugar per ton.

During the coming year this experiment will be conducted on a slightly larger scale and the beets will be cultivated in the experimental plot according to the best practices used in normal beet cultivation.

Notes on the Accumulation of Sugar In Stalks of Sugarcane Damaged By Wind

(By George Arceneaux, Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture).

It is well recognized that sugarcane of different varieties may differ greatly as to the susceptibility to wind damage. Confirming what was already well recognized from practical experience, Stokes (2) and Hebert and Arceneaux (1) in studies following the hurricanes of 1936 and 1940, found significant differences in the extent of wind injury suffered by different varieties now in extensive culture in Louisiana.

Before we can arrive at an accurate appraisal of the economic importance of varietal susceptibility to wind injury it is necessary to know the effect of such injury on the course of the subsequent maturity of affected stalks. Therefore, the following results obtained on wind-damaged stalks in connection with maturity studies at the Houma station are considered of interest.

Following the hurricane of August 5, 1940 it was observed that a number of stalks of different varieties which had been tagged for subsequent periodic sampling were broken or bent in the top joints. At each sampling date the usual studies were conducted on stalks showing no effects of wind injury and, in addition, broken and bent stalks of each sample-group were assembled separately for similar studies. Table 1 and 2 give comparisons as to indicated yield of sugar per ton of cane and average weight per stalk for broken, bent, and undamaged stalks as observed with plant and first stubble of Co. 281, Co. 290, and C.P. 29/320 at different dates from September 6 to November 28. These three varieties showed, in general, more extensive damage than others included in the maturity test. C.P. 28/11, which is especially susceptible to injury of this sort and has frequently suffered extensive bending in winds having no injurious effect on other commercial varieties, was not included. In a number of instances either broken or bent stalks, and occasionally both, were lacking in individual sample-groups which accounts for certain breaks in the continuity of the data given in the tables. It should be noted here also that while individual values given for undamaged stalks are based on three samples of forty stalks each, those for broken and bent stalks are based on whatever material happened to be available—usually single samples ranging from ten to thirty stalks per sample.

TABLE 1. Summarizing results of observations on broken, bent and undamaged stalks of sugarcane at different dates following the storm of August 5-7, 1940. Plant cane series.

Variety	Condition of Stalks	Date of Sampling: Sept. 6	Sept. 25	Oct. 15	Nov. 1	Nov. 15	Nov. 23	Nov. 29
Indicated yield of 96° sugar per ton of cane								
Co. 281	Broken	55.9	86.6	-----	151.7	-----	-----	128.3
	Bent	46.3	91.7	124.9	-----	182.0	-----	148.1
	Undamaged	50.9	93.9	145.0	177.1	186.9	-----	176.4
Co. 290	Broken	47.9	56.5	-----	-----	104.5	123.8	109.3
	Bent	48.8	74.0	126.1	167.8	183.0	-----	113.6
	Undamaged	61.0	88.0	137.9	167.5	184.5	159.2	148.5
C. P. 29/320	Broken	81.8	91.7	147.1	149.0	146.4	99.8	105.2
	Bent	-----	102.8	148.5	-----	162.8	-----	127.2
	Undamaged	81.4	112.4	156.8	184.0	195.8	163.9	155.2
Average % decrease (−) or increase (+) associated with damage	Broken	−4.0	−20.2	−6.2	−16.7	−34.0	−30.8	−28.6
	Bent	−15.0	−8.8	−9.1	+0.2	−6.9	-----	−19.0
Average weight per stalk (pounds)								
Co. 281	Broken	.71	.92	-----	1.08	-----	-----	.72
	Bent	.97	1.40	1.13	-----	1.17	-----	1.07
	Undamaged	1.02	1.24	1.39	1.56	1.53	1.42	1.31
Co. 290	Broken	1.50	.92	-----	-----	1.14	1.53	1.04
	Bent	1.10	1.00	1.88	1.60	2.32	-----	1.69
	Undamaged	1.38	1.95	1.88	2.12	2.36	2.19	2.24
C. P. 29/320	Broken	1.10	1.09	1.12	1.17	1.16	1.08	1.01
	Bent	-----	1.64	1.39	-----	2.12	-----	1.62
	Undamaged	1.26	1.67	1.77	1.70	1.92	1.68	1 62

TABLE 2. Summarizing results of observations on broken, bent and undamaged stalks of sugarcane at different dates following the storm of August 5-7, 1940. First stubble series.

Variety	Condition of Stalks	Date of Sampling: Sept. 6	Sept. 25	Oct. 15	Nov. 1	Nov. 15	Nov. 23	Nov. 28
Indicated yield of 96° sugar per ton of cane								
Co. 281	Broken	66.7	101.7	146.2	148.4	-----	150.9	130.8
	Bent	77.3	-----	165.1	187.7	200.6	164.0	144.9
	Undamaged	80.9	125.2	163.7	185.1	207.1	171.0	161.0
Co. 290	Broken	68.1	91.1	101.5	147.8	157.9	120.0	106.4
	Bent	79.9	105.8	145.6	180.8	182.2	153.2	129.5
	Undamaged	77.7	106.4	150.1	179.3	189.4	166.3	139.5
C. P. 29/320	Broken	84.5	124.3	157.9	160.9	122.1	122.0	98.4
	Bent	-----	118.4	154.4	200.8	195.2	-----	126.0
	Undamaged	97.1	134.7	167.7	193.7	197.9	155.7	136.0
Average % decrease (−) or increase (+) associated with damage	Broken	−14.2	−13.4	−15.8	−18.1	−27.7	−20.3	−23.1
	Bent	−0.9	−7.0	−3.4	+2.0	−2.8	−6.0	−8.3
Average weight per stalk (pounds)								
Co. 281	Broken	.78	.70	.79	.78	-----	.71	.95
	Bent	.48	-----	1.16	1.32	1.16	.98	1.03
	Undamaged	.84	1.07	1.10	1.19	1.25	1.09	1.09
Co. 290	Broken	1.30	1.32	1.30	1.40	1.51	1.37	1.07
	Bent	1.70	1.58	1.45	1.48	1.81	1.64	2.07
	Undamaged	1.53	1.69	1.87	1.76	2.12	1.82	1.66
C. P. 29/320	Broken	.96	.93	1.00	1.02	1.30	.88	.85
	Bent	-----	1.29	1.51	1.23	1.62	-----	1.52
	Undamaged	1.07	1.06	1.47	1.35	1.40	1.33	1.24

Weather conditions in the early fall were, on the whole, favorable and sugarcane matured in a fairly normal manner up to November 15. Severe freezes on November 15 and 16 with minimum field temperatures ranging from 21° to 22° F. Caused extensive injury which was followed by rapid deterioration.

Bent Stalks

In response to wind pressure some sugarcane tops may be bent to a horizontal position without causing the stalk to break. Ordinarily, tops so affected will later resume a vertical position and form the familiar "goose neck" double bend at the region of injury.

The crooked condition of the stalks resulting from tops bent during the growing season, a type of injury quite common in winds of sub-hurricane velocities, is a serious disadvantage at harvest because of difficulty in stripping. Results of these studies indicate an additional disadvantage comprising somewhat lower yields of sugar, the bent stalks (tables 1 and 2) having been, on the whole, slightly but rather consistently below the undamaged stalks in yield of sugar per ton of cane. The reason for this can not be conclusively established from these limited data, but there is the possibility that injury associated with bending may actually interfere with translocation and other normal functions of the stalk. On the other hand, bearing in mind that the tops of younger shoots may bend more readily than older shoots, it is quite possible that the bent stalks were, because of their relative immaturity, somewhat lower in sugar content at the time of injury than the undamaged stalks. The fact that differences in sugar content between bent and undamaged stalks were approximately as great at the beginning of sampling as they were at the end of the experiment would seem to lend support to this possibility, but it is recognized of course that the injury could have influenced the rate of sugar accumulation between the time of occurrence (August 5) and the dates on which samples were taken. The bent stalks were, on the whole, somewhat lighter in weight than undamaged ones, but the observed average difference is not sufficiently large to be considered highly significant.

Broken Stalks

Ordinarily, the most extensive and, presumably, the most important wind damage to the sugarcane crop occurs in the form of broken stalks. As a rule several buds immediately below the point of fracture germinate and make some growth, but such shoots do not ordinarily produce millable joints under Louisiana conditions. Results of studies on broken stalks similar to studies on bent stalks discussed above are also summarized in tables 1 and 2.

It is considered extremely interesting, and indeed surprising, that broken stalks of both plant cane and first stubble matured in a fairly normal manner as indicated by the extremely large gains in available sugar content, as well as by the consistency with which the gains were maintained from date to date. For instance, on September 6, broken stalks of Co. 281, Co. 290, and C.P. 29/320 first stubble (table 2) averaged 73.1 pounds of sugar per ton of cane; on September 25 the corresponding average was 105.7 pounds; on October 15, 135.2 pounds; and on November 1, 152.4 pounds. More or less similar average gains were observed in the case of plant cane (table 1).

On the other hand, it will be noted that broken stalks were distinctly below undamaged stalks in indicated yield of sugar per ton in almost all cases with average differences ranging from 4 per cent to 34 per cent in plant cane and from 13.4 per cent to 27.7 per cent in first stubble. It will be noted further that the disparity in sugar content between broken and undamaged stalks, in the average of all tests, became significantly more pronounced with an advance in maturity of the crop. This indicates rather conclusively that broken stalks matured less satisfactorily than did the undamaged ones.

The relatively satisfactory manner in which broken stalks did mature is considered worthy of note. In addition to fairly normal rises in sucrose content and purity, juice from broken stalks showed exceedingly large increases in total solids, as indicated by increases in Brix (not shown in the tables) from date to date. While the observed differences in sugar content between broken and undamaged stalks may not reflect accurately the actual loss of sugar suffered as a result of such breakage, the indicated yield of sugar per ton of broken stalks was much more satisfactory than might have been anticipated from cane which had been so severely injured. In most instances lateral shoots developed by broken stalks produced only a very few small leaves and it is surprising that in such cases sugar was accumulated at a rate so nearly approaching normal.

Literature Cited

(1) Hebert, Leo P., and Arceneaux, George. 1940. Notes on Wind Damage to Sugarcane. Sugar. Bull. 19 (5, Dec. 1), pp. 4-5.

(2) Stokes, I. E. 1936. Wind Damage to New Varieties of Sugarcane. Sugar Bull. 14 (24, Sept. 15), pp. 8-12.

Committee Meetings

A meeting of the Executive Committee of the Louisiana Sugar Cane Technologists Association was held at 2 P. M. on April 22d in the County Agent's Building, Thibodaux.

Present; Mr. Wallace Kemper, Mr. W. F. Daubert, Mr. Horace Nelson, Mr. E. V. Abbott, and Mr. Walter Godchaux, Jr.

Absent; Mr. Elliott Jones and Dr. A. G. Keller.

Also present was Mr. Marcel Voorhies to make a report on the cost of publishing the proceedings of the Association.

Mr. Claude Gouaux, Membership Chairman, was invited to present a report on his activities but was unable to attend.

Mr. Voorhies presented his report on publishing the proceedings of the Association. It was decided, after discussion, to publish these proceedings. Mr. Voorhies and Mr. Walter Godchaux, Jr. were instructed to conclude a contract with the printer for publishing these proceedings.

Mr. Daubert announced that the spring meeting of the manufacturing section is tentatively to be held on Thursday, June 12th, at 9:30 A. M., in the Auditorium of the Houma Experiment Station. A definite announcement will be carried in the *Sugar Bulletin* in ample time.

New Orleans, La., March 26, 1941.

The regular monthly meeting of the Executive Committee of the American Sugar Cane League was held Wednesday, March 26th, at 1:30 P. M., at the

office of the League, 407 Carondelet St., New Orleans.

There were present, Messrs: W. F. Giles, President, presiding; W. C. Kemper, John J. Shaffer, Jr., Marcel J. Voorhies, R. H. Chadwick, J. P. Duhe, Chas. A. Farwell, Walter Godchaux, Jr., Warren Harang, E. N. Kearny, Leon J. Landry, James A. Lanier, Stephen C. Munson, Charles A. O'Brien, David W. Pipes, Louis Robichaux, Dubourg Thibaut, Reginald Dykers, and Frank L. Barker.

Present also were the following, who are not members of the Committee:

Messrs. Wm. Patout, E. A. Rainold, Jr., L. G. Ebeling, Walter A. Sullivan, Paul G. Borron, Jr., and Louis LeBourgeois.

The meeting was called to order by President Giles.

The report of the Treasurer was submitted by Mr. Frank L. Barker. On motion of Mr. Chadwick, seconded by Mr. Kemper, the report of the Treasurer was adopted and ordered filed.

The excuses of Messrs. George L. Billeaud, E. J. Gay and C. F. Dahlberg, were presented, a copy of the minutes being requested by each.

The following letter was presented by President Giles:

New Orleans, La., March 24, 1941

Colonel W. F. Giles, President
American Sugar Cane League
Adeline, La.

Dear Colonel Giles:

In view of my Reserve Status in the Army, I have been called to active duty for a period of one year.

I am, therefore, requesting a leave of absence from the American Sugar Cane League for the duration of my tour.

I am very grateful for the many opportunities that have been afforded me to learn some of the numerous and complicated problems facing our industry.

Let me assure you and through you every member of the Executive Committee that I appreciate these opportunities and I am sure that they will be of tremendous advantage in years to come

Very truly yours,
(Signed) T. M. Barker.

A motion was offered that Mr. T. M. Barker be given leave of absence for the duration of his service in the Army. The motion was seconded and was unanimously adopted.

A report of the activities of the Educational Committee was submitted by Mr. Chas. A. Farwell, Chairman, for inclusion in the record.

At the request of Mr. Frank L. Barker, Chairman, the Sorgo Sugar Committee was dissolved and the matter of Sorgo Sugar placed in the hands of the Contract Committee, of which Mr. Stephen C. Munson is Chairman.

After some discussion of the legislative prospects for sugar the meeting adjourned.

Louisiana Sugar Industry Offers 100% Co-Operation in the National Defense Program

Mr. Wallace C. Kemper, member of the Louisiana State Defense Council and liaison officer for that Council and the Louisiana Sugar Industry, reported that all of the Louisiana sugar mills operating in 1940 have filled in their industrial questionnaire and have offered the facilities of their plants for whatever purpose they can serve in the national defense program.

Mr. Kemper feels greatly gratified and feels that the industry should be gratified to have come out 100% for complete cooperation in the national defense program.

The Louisiana Sugar Industry Considers Marketing Quotas

At the request of Mr. R. M. Murphy, Chairman of the Marketing Quota Committee, President W. F. Giles called a meeting of the Louisiana processors for 2:00 P. M., Thursday, April 17, 1941, at the County Agent's Building at Thibodaux. The meeting was called to order by President Giles and turned over to Mr. Murphy, Chairman of the Committee.

The fifty-eight companies which operated all of the Louisiana sugar mills in 1940 and which are to participate in the 1941 marketing allotment of sugar under the 1937 Sugar Act, were present or officially represented.

The two proposals, namely Formula A and Formula B, tentatively issued by the Sugar Section as recommendations by the judges presiding at the public hearing held on February 14, 1941, to determine the 1941 marketing allotment of the mainland cane area processors, were discussed in detail. The group unanimously voted to instruct the Quota Committee to write a brief completely substantiating and endorsing Formula B, and disapproving of Formula A as not fair and equitable to the Louisiana processors and to the Louisiana producers of sugarcane for sugar.

Reallotment of Philippine 1941 Sugar Quota Deficit Announced

(*April 11, 1941*)

The reallotment of a deficit of 73,232 short tons, raw value, in Philippine sugar quota to foreign countries other than Cuba, was announced today by the Sugar Division of the Agricultural Adjustment Administration. The deficit, reallotment of which is required under the Sugar Act of 1937, was prorated on the basis of the quotas in effect for such countries.

The deficit represents the difference between the 1941 Philippine sugar quota of 1,055,895 short tons, raw value, established under the Sugar Act of 1937, and the amount of sugar which may be admitted free of duty into the United States from the Com-

monwealth of the Philippines under the Tydings-McDuffie Act (Philippine Independence Act). The quantity of sugar permitted to enter duty-free is 800,000 long tons of unrefined sugar and 50,000 long tons of refined sugar, or the equivalent of 982,663 short tons, raw value, on the basis of 1940 polarization figures. Similar reallotments of that portion of the Philippine sugar quota subject to the full rate of duty of 1.875 cents per pound, raw value, have been made in every year except 1940.

The revised 1941 quotas for foreign countries other than Cuba are as follows:

Country	1941 Quota Prior to Reallotment of Philippine Deficiency	Increase Resulting from Philippine Deficiency	1941 Revised Quota
	(Short tons, raw value)		
Argentina	8	21	29
Belgium	160	426	586
Canada	306	817	1,123
China and Hongkong	156	417	573
Costa Rica	11	30	41
Czechoslovakia	143	381	524
Dominican Republic	3,618	9,654	13,272
Dutch East Indies	115	306	421
Guatemala	182	485	667
Haiti, Republic of	500	1,334	1,834
Honduras	1,863	4,969	6,832
Mexico	3,272	8,733	12,005
Netherlands	119	315	434
Nicaragua	5,545	14,798	20,343
Peru	6,030	16,091	22,121
Salvador	4,453	11,884	16,337
United Kingdom	190	508	698
Venezuela	157	420	577
All others	4	11	15[1]
Sub-total	26,832	71,600	98,432
Unallotted Reserve	250	1,632	1,882
Total	27,082	73,232	100,314

[1] The revised 1941 quota shown above in tons includes the following in pounds, raw value: Australia, 811; Brazil, 4,765; British Malaya, 103; Colombia, 1,064; Dutch West Indies, 26; France, 697; Germany, 466; Italy, 6,970; Japan, 15,958.

Man and His Sugar Are Never Parted

(*4/27/41*)

Vichy, April 26.—Pocket sugar boxes are the latest French invention to cope with rationed life.

Since one is allowed only 500 grams of sugar a month in one package, Frenchmen must carry their day's rations with them if they want their coffee and tea sweetened. The demand has been met with little special leather boxes holding two lumps of sugar and selling for 145 francs (about $3.25).

Less elaborate ones of metal and plastics may now be purchased. Pill boxes, razor blade boxes, cigarette tins and film holders also are used.

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The Rapid Multiplication of a Promising New Sugar Cane Variety

(By W. G. Taggart and E. C. Simon, Louisiana Agricultural Experiment Station).

The active interest in new varieties of sugarcane and the desire for an ample seed supply prompts the reprinting of this article from the June 15th, 1933 issue of the *Sugar Bulletin:*

Desiring to build up our available seed supply of the promising new Variety C. P. 28-19 during the summer of 1932, we undertook to propagate it as rapidly as possible.

The first reference that we have to show that such work has been done in Louisiana is found in reprint of Louisiana Bulletin No. 5 published in 1895 by W. C. Stubbs. In this bulletin Stubbs states, "In transplanting, each sucker was carefully removed from its mother stalk and planted separately about two feet apart."

Shortly after the introduction of the P. O. J. canes into Louisiana, Dr. E. W. Brandes, of the United States Department of Agriculture, recommended the transplanting of suckers. Later Mr. A. H. Rosenfeld recommended that the method of Dr. Brandes be supplemented by planting young stalks through the first three weeks of July. Rapid increases may be secured by following either of these methods, but actual experience has taught us that the process is laborious and that a great many perfectly sound eyes are either damaged or destroyed when the sucker transplant method is employed; and that the practice of using whole canes is wasteful.

Knowing of the great success met with by Mr. D. L. Van Dine, who used the Mayaguez single eye method for the rapid propagation of canes at the Baragua Station in Cuba, we decided to use the method as given by Van Dine, making such modifications as might be necessary due to Louisiana conditions.

The fact is well known that when a stool of sugar cane is allowed to sucker to its fullest extent that more shoots germinate and begin to grow than the stool is able to carry through to maturity. Due to natural conditions such as shading, competition for food, and other factors connected with the stool, many of the shoots that germinate die out and by harvest time a considerable number have thus been eliminated. In gappy stands the mortality is lower due to the spreading of the stools into adjacent gaps. A careful consideration of these facts makes it at once evident that the least amount of damage to the stool will result from the removal of the older shoots as soon as they have jointed sufficiently for propagation. Younger shoots that are already growing will take the place of those removed. Under ordinary circumstances many of these younger shoots are killed out by the natural development and crowding in the stool.

Using the above obvious facts as a basis, we allowed our seed plots to sucker freely. When the oldest shoots had joined so as to have not less than 3 or 4 joints, they were carefullly removed. An ordinary curved pruning knife was used for this operation, and was found to work quite satisfactorily. The older shoots could easily be cut out of the stool at the ground surface without injuring the remaining younger ones which were protected by the curvature of the knife blade.

The stalks removed from the stools were cut into one eye pieces by severing the internodes in the middle, no attempt being made at this time to remove the adhering leaf sheaths. After cutting a stalk in the above manner, the adhering leaf sheaths were trimmed away by ringing each piece at the node with a

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The American Cane Growers' Assn.
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sharp knife in such a way as to allow the shuck to be pulled off without injuring the immature bud. When the ringing is carefully done no damage results to the node that would allow rots to set in and destroy the seed piece. Experience taught us the necessity of removing the leaf sheaths so that the eyes would be unhampered as they germinated and started to grow. The eyes are tender and immature, and are in many instances unable to push their way through these sheaths. This results in a heavy loss of good eyes that might otherwise germinate.

After removing the sheaths from the seed pieces these were allowed to dry. The ends were then dipped into hot paraffin, care being taken not to let the eyes come in contact with the paraffin. The pieces of top remaining after cutting off all available joints were paraffined on their cut ends and severely topped back. Again by experience we found out that were the operation of paraffining not properly performed our results would be poor. Plantings of seed pieces whose ends had not been paraffined germinated very poorly, and those where the ends were damp at the time the paraffin was applied, in some cases lost their paraffin caps, and eyes that did germinate on such pieces in many cases later died. This was found to be due to the fact that rots readily entered the soft immature pieces through the cut ends, rapidly spread back to the nodal region, and killed the young plants before they had established themselves in the soil.

After allowing the paraffin to set thoroughly on the treated seed pieces, these were placed in pails of water to keep them from drying out too rapidly. Damp moss or sacks would answer the same purpose and probably be better. Here again care must be taken not to place the pieces in water until the paraffin has adhered well to the ends, otherwise it may loosen and fall off, and the seed pieces, as mentioned in the previous paragraph, may rot.

Land to be used for planting purposes was carefully prepared and pulverized into the condition of a well worked garden.

By trial of different methods of planting we found that the best results were secured by placing the seed pieces in the soil at a 45 degree angle, the eye on top of the seed piece, pointing upwards. This method gave us far better results than flat planting. Bearing this point in mind, we worked out the following method of planting which was very satisfactory and quite rapid. In this method two men were employed; the first to open the ground; the second to plant the seed pieces and press the soil over them. A heavy hoe was used to open the row. This was dug into the loose soil at approximately a 45 degree angle, then pulled backwards by the first man who worked at all times walking backwards. A small opening was left in the soil by the operation. Into this hole the second man carefully placed the seed piece, with the eye on top pointing upwards. After planting, the first man removed his hoe, stepped backwards a pace, and then opened another hole about 12 inches from the first. The second man pressed loose dirt over the planted piece with his foot. Tops were inserted into the soil at a 45 degree angle. After planting, each row was carefully watered, and a small amount of grass hay scattered over it. The covering prevented the rapid evaporation of moisture from the soil and kept it from crusting. Conditions were thus left ideal for a rapid germination of the young eyes and for the established of the young plants in the soil.

In about 12 days the seed pieces had germinated sufficiently so that the covering was not necessary, and it was then removed. It is necessary that the covering be removed after the canes have germinated well and before cultivation starts. Should crickets congregate under the covering and begin seriously to damage the young plants it is well to remove it. Should packing rains occur it may be necessary to loosen the soil over the plants with hoes. This had to be done on one of our plantings in 1932. Frequent light cultivations were used to keep down grass and hold a mulch. The young plants were watered whenever necessary, and as soon as they were well up to a stand a heavy application of nitrate of soda at the rate of 400 pounds was applied.

Three plantings were made in the summer of 1932 by the above method. Better than 90 per cent of the eyes planted came up and grew, and many of the tops did likewise. Our first plantings were made June 7; second, June 23; and third on July 25. After July 25 all available land had been planted. At this time those stools from which we had secured our seed supply could hardly be distinguished, both in number of stalks and in their height, from other stools which had been left untouched. We believe that it would have been entirely possible to make plantings until September 1, with assurance that the increase in area under the variety, while giving no seed cane in the fall would result in an increased area of stubble the following spring and so prove profitable. At harvest time stalks in the first planted plot were from 4.50-5.00 feet high; those in the second,

3.50-4.00; and those in the third, 1.50-2.00 feet. The stalks in plots 1 and 2 were relatively mature except for the younger suckers, while the stalks in plot 3. though comparatively immature, had matured enough to give seed cane from which we secured a fairly good germination this spring. The stubbles of all three plots came out to excellent stands this spring, and indicate a heavy yield.

We see no reason why a new and valuable variety of cane could not be propagated by the above method with extreme rapidity, and at a comparatively small cost.

Co. 290—First Stubble Fertilizer Demonstration

C. B. Gouaux

Treatment Per Acre	Brix	Sucrose	Purity	Tons Per Acre	Pounds Raw Sugar —96 Test	
					Per Ton	Per Acre
300 lb. 12-0-8	17.70	13.20	74.58	25.35	180.0	4563.0
300 lb. 12-8-8	17.10	12.29	71.87	27.17	165.3	4491.2
165 lb. Cyanamid	17.10	12.04	70.41	27.00	161.3	4355.1
300 lb. 12-8-0	17.00	11.91	70.06	25.14	159.3	4004.8
Check	15.70	10.35	65.92	19.99	133.5	2668.7

Calculations on Basis of Average Raw Sugar Par Price of $2.66 Per Ton.

Treatment Per Acre	Value		Less $1.00 Harvest	Less Cost Fertilizer	Per Acre Balance
	Ton	Acre			
300 lb. 12-0-8	$2.85	$72.25	$25.35	$4.50	$42.40
165 lb. Cyanamid	2.66	71.82	27.00	3.00	41.82
300 lb. 12-8-8	2.66	72.27	27.17	5.83	39.27
300 lb. 12-8-0	2.66	66.87	25.14	4.65	37.08
Check	2.05	40.98	19.99		20.99

Notes.

The fertilizer demonstration was conducted during the season of 1940, on Beaucejour plantation of Mrs. J. A. Roy, in cooperation with County Agent, S. J. Bowles of Lafayette parish. Mr. Albert Grossi, overseer, gave very efficient assistance and cooperation in the field work, which included measurements of plots, application of fertilizer, cultivation, harvesting and weighing of plots.

Size of Demonstration Field: 5 acres; divided into five one acre plots.

Soil Type: Lintonia silt loam.

Date Fertilized. April 24, 1940.

Date Harvested: Nov. 20, 1940.

Procedure for Refining of Over-Quota and Export Sugars Announced for 1941

United States Department of Agriculture, Washington, D. C., May 6, 1941.

The Department of Agriculture announced today that importers of sugar would be permitted this year to bring sugar into the continental United States under bond for processing and export without being required to turn over to customs' custody an equivalent quantity of quota sugar.

It was also announced that during the current year over-quota sugar may be released under bond by Collectors of Customs for refining and return to customs' custody within 30 days or within any longer period that the Department may establish. However, requests for refining such sugar under bond during December will, as before require prior approval of the Sugar Division of the Agricultural Adjustment Administration.

The Sugar Division explained that this procedure has been followed under sugar quota legislation, except in the last two months of 1940. In that year, because of large stocks of quota sugar in the United States, regulations were issued on October 26, limiting during the remainder of 1940 the processing of sugar for export by requiring that an equivalent amount of quota sugar be turned over to customs' custody, and prohibiting the release from customs control of any over-quota sugar unless such sugar was damaged or in danger of deterioration.

It was pointed out that the return to the procedure in effect prior to October 26, 1940, would facilitate the building up of reserve stocks of raw and refined cane sugar on the eastern seaboard for 1942. It is expected that this procedure will be followed during the present period of national emergency, should the quota system be continued beyond its expiration date of December 31, 1941.

Excerpts from Annual Report of Bureau of Agricultural Chemistry and Engineering, 1940

The American Sugar Cane League in its constant efforts to safeguard the interests of the Louisiana sugar industry has always been keenly interested, and cooperates wherever possible, in the sugar work of the Bureau of Agricultural Chemistry and Engineering.

In appreciation of the endeavors of the Bureau, and for the benefit of our members we are pleased to reproduce from the Annual Report of the Bureau extracts referring specifically to sugarcane and cane sugar.

"CARBOHYDRATE RESEARCH
"Sugarcane and Cane Sugar

"The commercial value of new varieties of sugarcane depends in part on the ease with which their juices are clarified, in comparison with those of established varieties. Two newly released varieties, C.P. 29-103 and C.P. 29-120, were studied from this standpoint during the last sugarcane harvesting season in Louisiana. The results with each varied somewhat for different localities, but the indications were that sugarcane of either variety from most of the existing sugarcane fields would give no special clarification difficulties. However, when grown under adverse agronomic conditions, these new canes yield juices which are relatively low in phosphate and high in nitrogen. Such juices are difficult to clarify and give poorer sugar recovery.

"In further studies on the effect of degree of liming on juice clarification, the best results,as regards color, ash, lime salts, and silica, were obtained when lime was added to the cold juice to a pH of 7.0 to 7.5. Depending on the concentration of phosphates in the juice and the duration of heating during settling, the juice limed to this degree in the cold will yield clarified juice which may vary from a pH of 6.2 to one of 7.2. This degree of liming is also necessary to obtain a satisfactory precipitation of phosphates. Additional liming is not justified, because the increase in precipitation of the phosphates is more than offset by increases in soluble lime salts.

"Several varieties of cane obtained from an area of Louisiana muck land were found exceptionally low in phosphates and high in nitrogen. The juices

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from this cane, when lime-defecated, showed extremely poor clarification and contained an excessive amount of lime salts. However, when milled in small proportions along with cane of normal phosphate content, the mixed juices obtained clarified without this difficulty. .

"There have been numerous complaints from plantation sugarhouses in Louisiana during the past two seasons because of an unusual sediment which formed during the sirup and molasses stages of sugar production. This sediment prevented maximum sucrose recovery, reduced the refining quality of the raw sugar produced, and caused corrosion or scaling of the heating surfaces with which it came in contact. A chemical investigation established the fact that the sediment was essentially a salt formed by the action of lime on aconitic acid existing in the cane juices. Analysis of the concentrated juices from different varities of cane grown in various localities showed that this acid is present in some of the more recently adopted Louisiana cane varieties in quantities varying from 0.5 to 1.65 per cent on solids, the largest quantity being found in the popular Co. 290 variety. It appeared that plant cane contains more aconitic acid than does rattoon cane. Heretofore, the aconitic acid in cane juice has been considered to have little or no effect on clarification, but the trouble caused by abnormal quantities of this substance in the juice of recently adopted sugarcane varieties warrants a thorough study of its effect on the clarification of cane juice in general. Obviously, a method must be devised to eliminate this acid in clarifying the juice. Aconitic acid might become a byproduct of sugar production if uses were developed to make its recovery from defecation muds or from molasses profitable.

"In cooperation with the Bureau of Plant Industry a study was made of the composition of juices from different sections of the cane stalk at two stages of maturity, using two sugarcane varities, C.P. 28-19 and Co. 290. In each case the top three elongated joints (after discarding the terminal bud and associated joints under 2 inches long) gave very different results than did the lower joints. Form the results with C. P. 28-19, it was concluded that inclusion of the top three elongated joints in cane harvested for milling increased the tonnage of cane per acre without any increase in recoverable sugar per acre. From the results with Co. 290, it appears that the top five joints must be put into this category; the top three joints, when included in mill cane, would actually decrease the recoverable sugar per acre. The common plantation practice is to top Co. 290 too high and C.P. 28-19 too low. In the case of the latter some material is being discarded which would increase the yields of cane and sugar per acre.

"A study in cooperation with the Bureau of Entomology and Plant Quarantine of the composition of sugarcane damaged by cane borers indicated that the damage results from material being actually removed or destroyed by the borers and not from chemical changes occurring in the remaining cane. Borer-damaged cane is likely to yield juices of lower sucrose and higher nonsugar content, especially when the damage includes destruction of substantial quantities of the high-sucrose softer core, as happens in the case of variety Co. 281.

"Experiments were made on the use of raw and partially refined grades of cane sugar for production by industrial consumers of 'liquid sugar,' a refined sugar in a sirup rather than a crystal form, which can be used satisfactorily for some purposes in the food and confectionery industries. Cost data were obtained for the best processes. The results indicated that Louisiana washed raw and turbinado sugars are the grades most suitable for small-scale production of liquid sugar. Use of these special grades of sugar offers decided advantages over the purchase of raw sugar for the same purpose.

"More data were obtained with regard to reducing the sulfite content of table sirups and high-grade molasses made by the sulfitation process. It was found that using twice the theoretical equivalent of hydrogen peroxide reduces the sulfit content to a satisfactory low percentage. Products may be treated at a low temperature, but subsequent heating to 90°-95° C. is necessary to restore approximately the original colors.

"Further attention has been given to the loss of sucrose in harvested sugarcane by inversion and to the deterioration of cane by fermentation following freezing in the field. Loss of sucrose in sugarcane during the interval between harvesting and grinding is an item of great importance. In recent studies in cooperation with the Bureau of Plant Industry it was found that sugarcane subjected to a cold shock, short of actual freezing, acquires increased resistance to deterioration during storage, provided it is left standing so as to recover under natural conditions for a short period before harvesting. This means that it is advisable to wait a few days after a light frost before cutting and windrowing the cane. A comparison of the normal inversion characteristics of four varieties of plant cane from two locations having different kinds of soil showed that inversion was only half as rapid in cane from one location as in those from the other, although the initial purity was essentially the same in both lots. The canes showing the more rapid inversion were very high in nitrogen and low in phosphates. High nitrogen content, when due allowance is made for varietal characteristics, is an indication of physiological immaturity and it is likely that, in spite of satisfactory sucrose purity, the more rapidly inverting cane was actually less mature than that from the other location. A high nitrogen content of the soil would tend to prolong active growth and thus retard maturity.

"After sugarcane has been exposed to freezing temperatures, fermentation frequently occurs with production of dextran, which increases the viscosity of sirups and molasses to such an extent that crystallization of sucrose is difficult and in many cases impossible. Development of means whereby freezing damage can be minimized is of the utmost importance. Cane was not damaged much by freezing weather last season, but studies on the effects of freezing were continued by artificially freezing selected samples of cane of two varieties at approximately 25° F. and noting the progress of deterioration during subsequent storage at a temperature of 65°. While the rate of spoilage following this freezing was not so rapid as has been found at times in cane frozen in the field, the final results were much the same. The first fermentation to appear was of the alcoholic type, involving the destruction of sugar solids with the formation of alcohol and carbon dioxide. Later the gum-forming fermentation appeared, as indicated by the presence of dextran and acetic acid. It was also found that juice expressed from frozen cane, even be-

fore fermentation within the cane was indicated, was very susceptible to rapid souring. After several hours the juice from unfrozen cane began to show a slow souring, but in the case of juice from the frozen cane the appearance of souring was almost immediate and progressed rapidly. It may be possible to judge the degree of freezing damage to cane by fermentation rate tests on expressed juices. It is also indicated that prompt processing of juices milled from frozen cane is essential if spoilage in addition to that present at the moment of milling is to be avoided.

"The causes of color formation in sugar-plant juices, sirups, and sugars were investigated with the object of developing more efficient methods for white-sugar production. Although the investigations are still in their early stages, it is becoming evident that one major cause for darkening of sugar-plant juices during the processes of manufacture is the decomposition of the sugars themselves by the hydroxylion. This is followed by reaction of the decomposition products with oxygen, and probably also by reaction between themselves by condensation. Additional causes of darkening, which remain to be studied, include the reactions of the nonsugars, such as iron, tannin, and nitrogenous compounds, between themselves and with the decomposition products of the sugars."

Excerpts from Annual Report of the Bureau of Plant Industry, 1940

The American Sugar Cane League has over a long period of years consistently cooperated with the Bureau of Plant Industry, U. S. Department of Agriculture, and has supplemented, on a substantial basis, the federal funds allocated for sugarcane research. The League is presently financially cooperating in the development of cold-resisting varieties of sugarcane.

It therefore affords us considerable pleasure to quote, for the benefit of our members, references to sugarcane research from the Annual Report of the Chief of the Bureau of Plant Industry, 1940:

"Progress in Breeding Cold-Tolerant Sugarcane

"The winter 1939-40, coldest in parts of the sugarcane belt in nearly a half century, brings prominently to the fore efforts of the Bureau to breed cold-tolerant commercial sugarcane varieties. Increasingly favorable prospects of removing the hazards that lie in unseasonably early or severe freezes are indicated by the performance in 1939 of thousands of F_1 seedlings of commercial cane crossed with the sild *saccharum spontaneum* of Turkestan. Buds of many seedlings survived temperatures of 26° F. and lower. By using a photo-period house to synchronize the blooming of the hybrids and commercial cane at the United States Sugar Plant Field Station, Canal Point, Fla., many backcrosses were obtained in the fall of 1939. Selected hybrids of good type and high quality are available for evaluation in 1940.

"New Sugarcane Variety Released

"Further progress in developing sugarcane varieties improved in resistance to diseases and in other characteristics is shown by release in the spring of 1940 for commercial culture of a new mosaic-resistant variety, C. P. 31/511. Ease of peeling, softness, and sweetness, together with other desirable characteristics, make it especially suitable for chewing. Sugarcane is grown extensively for chewing, and this variety, it is believed, will prove especially adapted for that purpose. Seed cane was furnished to State agencies in the sugarcane States. Because of its resistance to mosaic, culture of C. P. 31/511 should aid in control of that disease in commercial fields by encouraging abandonment of sources of infection represented by innumerable dooryard plantings of the old chewing varieties.

"Spread of Chlorotic Streak of Sugarcane

"Chlorotic streak of sugarcane, first discovered in eastern Louisiana in 1937, was reported in western Louisiana in 1939. Tests in 1939 showing yield losses of as much as 30 per cent emphasize the importance of controlling the disease in Louisiana, and of preventing its spread to other States if possible. Investigations conducted during the present year, including roguing experiments, hot-water treatment of seed cane, research on the causal organism (presumably a virus), and studies of symptoms and reaction of different sugarcane varieties to the disease, contributed to development of means for its control."

Annual Report of P. J. deGravelles

(From 1940 Annual Narrative Report, County Agent P. J. deGravelles, St. Mary Parish)

Sugar cane is the principal crop of the parish and presents many major problems.

A very bad season was experienced again this year, beginning with the coldest weather witnessed in the past decade, the temperature reaching sixteen degrees and remaining almost the same for about a week. This weather greatly injured the stubble cane crop. The growing season was very unfavorable with excessive rains during the cultivating season, and during September and October the weather was too dry. A storm in September also did some damage.

Cultural Practices

The recommended cultural practices of deep preparation, shallow cultivation, and early lay-by have been thoroughly demonstrated and are being practiced by nearly all cane farmers. However, there is a tendency for some farmers to go to the extreme of laying by too early, and this must be carefully watched and corrected.

Diseases

The control of Mosaic disease is one of the major problems of the sugar cane farmer. Mosaic is prevalent over the entire parish, but should the fields become one hundred percent infected, our yields would drop twenty-five per cent or more, or approximately 142,000 tons valued at $669,750.00. For the

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past several years we have been able to keep the per cent of infection down to a minimum, and tonnage has not been affected.

The goal to which we are working on this project is for every cane grower to have a seed cane plot which will receive special care and be rogued for Mosaic.

Demonstration meetings on how to rogue cane were held as follows:

Year	Number of meetings	Attendance
1937	19	148
1938	50	244
1939	27	175
1940	2	11

These meetings gave an opportunity to every cane farmer of the parish to learn to identify and rogue cane.

One hundred and seven farmers, who plant over sixty-five per cent of the cane crop, rogue seed cane plots. The results of this work are outstanding. Fields planted from rogued plots show from only a trace of Mosaic or less than one per cent to the most, seven per cent.

Result Demonstrations—Rogueing for Mosaic Disease

COLUMBIA SUGAR COMPANY started in 1937 with a seed cane plot that ran sixteen per cent Mosaic, rogued carefully, and used as foundation stock. Planted seed cane plots, and rogued in 1938 and 1939. The general planting in 1940 from the rogued seed plots of 1939 showed seven per cent Mosaic.

RUDOLPH HEBERT started in 1938 with cane that ran better than fifty per cent Mosaic infected. Healthy seed was selected, and approximately two acres planted as a seed plot. This plot in 1939 showed about seventeen per cent Mosaic, but was carefully rogued and planted. The 1940 crop from this plot ran six per cent Mosaic.

STERLING SUGARS, INC began rogueing in 1937. The 1938 crop was rogued and planted for the 1939 crop. Seed was sold to Idlewild Dairy Farm in the fall of 1939 from general field run cane that was not rogued, and was planted for the 1940 crop. This cane has less than one per cent Mosaic.

The above results show definitely that Mosaic can be controlled under present conditions.

Chlorotic streak, a new disease in the state, has been found in the parish and is being closely watched. It has been found only in C. P. 29-320, a variety that is used very little. However, if it should spread to the new varieties that are generally used, it may become serious.

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Borer Control

The control of the sugar cane borer is one of the problems which seems to have been partially solved. By rogueing dead hearts of cane early in the spring, thus destroying a great number of first generation of borer, and by using Trichogramma minutum (cane borer parasites), the cane borer damage has been reduced to a minimum.

Artificial colonization of trichogramma minutum was begun in the parish in 1932 and has been used every year from that time. Millions of parasites have been liberated each year.

A study of the natural parasitism from 1931 to the present time has revealed interesting facts. The following counts were made in June on the second generation of borer eggs:

1931	12% of the eggs parasitized
1932	16.3% of the eggs parasitized
1933	18.3% of the eggs parasitized
1936	29.4% to 95% of the eggs parasitized
1937	46% to 54% of the eggs parasitized
1938	50% or over of the eggs parasitized
1939	55% or over of the eggs parasitized
1940	55% or over of the eggs parasitized.

The above study indicates that the millions of parasites released in the past eight years are responsible for the high natural parasitism prevailing definitely decreased the borer infestation.

Committee Meetings

A meeting of the Contact Committee of the American Sugar Cane League was held at Angola Penitentiary, Angola, Louisiana, on May 6, 1941 Those present were:

Contact Committee Members: Stephen C. Munson, Elliot Jones, George L. Billeaud, E. A. Maier, Horace Nelson, F. A. Graugnard, Jr., M. J. Kahao, Jr., Charles A. O'Brien.

Representing Angola Penitentiary: Henry Frith, D. D. Bazer.

Experiment Station Staff: W. G. Taggart, C. W. Edgerton, E. C. Simon, C. B. Gouaux, I. L. Forbes, W. J. Luke, P. J. Mills.

Houma Experiment Station: E. V. Abbott, E. M. Summers, R. L. Holmes, Leo P. Hebert, E. K. Bynum, J. W. Ingram.

Visitors: Walter Godchaux, M. L. Shaeffer, Mr. Thibaut, Mr. Dufrenoy, Marcel J. Voorhies.

In the forenoon, a visit was made to the fields and camps of Angola for the purpose of inspecting the crops and points of general interest to the visitors.

After lunch, the meeting was called to order and Chairman Munson announced that the purpose of the meeting at Angola was for the Contact Committee to discuss with Penitentiary officials the possibility and advisability of establishing fields of disease free cane at Angola to be used for distribution for planting purpose throughout the State.

Mr. Henry Frith, General Manager of Angola, stated that his administration was willing to cooperate with the cane growers in any way that it could help along and that he would be glad to take the matter under consideration, but that if the Penitentiary went into this project, it would have to be guided by the Experiment Station staffs (Baton Rouge and Houma) and that he hoped that members of both staffs would feel free to visit Angola at any time that they desired. The matter was left for further consideration.

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THE SUGAR BULLETIN

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Will You Do Your Part?

Louisiana Maneuver Area Council

(Val Irion, Major, Infantry, U. S. A., State Maneuver Area Director)

The citizens of Louisiana have tackled the biggest job in the history of the State. They are to furnish a maneuver site of 15,000,000 acres for the United States Army War Games scheduled for next September. More than 500,000 men representing the greatest troop concentration in the annals of the War Department will participate in these maneuvers.

"Louisiana's Battlefield" embraces an area larger than Holland, Switzerland, Belgium or Denmark. 23,475 square miles of 31 parishes will constitute the gigantic stage for the Army forces.

In setting the stage for this stupendous production, the Louisiana Maneuver Area Council, appointed by Governor Sam Jones, must gain clearance rights on this vast acreage from more than 100,000 landowners. However, within the first week of the Council's program, more than 10,000 Maneuver Agreements were signed by property owners.

This response to the Army's request for a maneuver area sufficiently large to maneuver the greatest troop concentration in the country's history has been amazing. Maneuver Agreements are coming in to the Rents and Claims Office at Camp Beauregard in a flood of mail sacks that has necessitated the doubling of office personnel to handle the filing and clerical work involved.

This constant stream of signed agreements is an eloquent testimonial to the patriotism of the people in Louisiana and to their willing spirit to do their part for National Defense.

Not a section of the 15,000,000 acres will be overlooked. The organization of the Louisiana Maneuver Area Council reaches into every ward in the 31 parishes of the Maneuver Area. Ward Committees are responsible to their Parish Councils for a complete coverage of clearance rights so that the parish land block can be presented with clear title to the War Department.

Major Val Irion, State Maneuver Area Director, has launched a campaign to contact every state and local business, professional, fraternal and social organization to gain their cooperation with the State Council and in particular with the local Council in their home parish.

The parishes included in the Maneuver Area are: Winn, Grant, Ouachita, Caldwell, LaSalle, Richland, Franklin, Catahoula, Concordia, Caddo, Bossier, DeSoto, Webster, Red River, Lincoln, Jackson, Bienville, Vernon, Beauregard, Calcasieu, Allen, Jefferson Davis, Sabine, Natchitoches, Avoyelles, Evangeline, St. Landry, Acadia, Lafayette St. Martin, Rapides.

The State Council's Executive Board comprises: Governor Sam Jones as Chairman and Brigadier General Raymond H. Fleming, Vice Chairman; Major Val Irion, State Maneuver Area Director, and Colonel R. B. Cole, Army Liaison Officer. Council members are Lucille May Grace, Director of the State Land Department; Harry D. Wilson, Director of the Department of Agriculture; John E. Coxe, Superintendent of Education; G. T. Owen, Director of the Department of Commerce and Industry; Brigadier General Steve Alford, Director of Public Safety; James D. Mercer, President State Police Jury Association; Theo O. Hotard, President of the Louisiana Association of School Board Members and James B. Aswell, Director of Public Relations for the Executive Department of the State.

Louisiana is doing its part for the National Defense program.

THE
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Marcel J. Voorhies, Editor
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Allotment of 1941 Mainland Cane Area Sugar Quota for Processors

Washington, D. C., May 19, 1941.

The Department of Agriculture announced today allotment of the 1941 mainland cane sugar quota of 430,794 short tons, raw value, to the 60 cane sugar processing companies in Louisiana and Florida.

The Sugar Act of 1937 directs the Secretary of Agriculture to allot the sugar marketing quota for any area if he finds that such allotment is necessary to prevent disorderly marketing, to give all interested persons an equitable opportunity to market sugar, or for other causes.

The allotments were computed by giving 25 percent weight to past marketings, and 75 percent weight to processings of sugarcane grown on proportionate share acreages (acreage allotments). Past marketings were measured by the average quantity of sugar marketed by each processor during the three calendar years 1938, 1939, and 1940. Processings were measured by processings of sugarcane from acreage allotments of the 1939-40 and 1940-41 crops, with a weighting of 1 and 2, respectively.

The following are the allotments for 1941:

Processor:	Allotment (short tons, raw value)
Alma Plantation, Ltd.	5,983
J. Aron & Co., Ltd.	6,091
Baldwin Sugars, Inc.	820
Billeaud Sugar Factory	8,537
Blanchard Planting Co., Ltd.	1,985
Breaux Bridge Sngar Cooperative, Inc.	5,201
Burton-Sutton Oil Co., Inc.	2,981
Caire & Graugnard	3,006
Caldwell Sugars, Inc.	4,999
Columbia Sugar Co.	3,188
Cora-Texas Manufacturing Co.	3,776
Cypremort Sugar Co., Inc.	5,318
Delgado-Albania Plantation Comm.	5,101
Dugas & LeBlanc, Ltd.	6,734
Duhe & Bourgeois Sugar Co.	5,537
Erath Sugar Co.	6,950
Evangeline Pepper & Food Products Co.	2,542
Evan Hall Sugar Cooperative, Inc.	9,096
W. Prescott Foster	5,514
E. J. Gay Planting & Manufacturing Co., Ltd.	2,525
Glenwood Cooperative, Inc.	4,812
Godchaux Sugars, Inc.	26,850
Haas Investment Co., Inc.	2,131
Helvetia Sugar Cooperative, Inc.	3,613
Iberia Sugar Cooperative, Inc.	9,584
Kessler & Sternfels	206
Lafourche Sugar Corp.	5,777
Harry L. Laws & Co., Inc.	13,337
Levert-St. John, Inc.	8,942
Louisiana Penitentiary Board	4,427
Louisiana State University	350
Magnolia Sugar Cooperative, Inc.	3,499
Maryland Co., Inc.	3,265
Meeker Sugar Refining Co.	5,303
Milliken & Farwell, Inc.	11,252
D. Moresi's Sons	2,595
M. A. Patout & Son, Inc.	5,784
Polar Grove Planting & Refining Co., Inc.	5,665
Realty Operators, Inc.	27,228
Roane Sugars, Inc.	4,504
E. G. Robichaux Co., Ltd.	4,048
Ruth Sugar Co., Inc.	2,005
San Francisco Planting & Manufacturing Co.	1,199
Clarence J. Savioe	5,623
Shadyside Co., Ltd.	4,454
Slack Brothers, Inc.	2,631
Smedes Brothers, Inc.	2,606
The South Coast Corp.	27,319
Sterling Sugars, Inc.	10,154
J. Supple's Sons Planting Co., Ltd.	3,793
Tally-Ho, Inc.	3,428
Teche Sugar Co.	4,073
Valentine Sugars, Inc.	7,049
Varmilion Sugar Co., Inc.	4,715
Vida Sugars, Inc.	3,344
Waterford Sugar Cooperative, Inc.	4,568
A. Wilbert's Sons Lumber & Shingle Co.	5,707
Youngsville Sugar Co.	4,627
Fellsmere Sugar Producers Ass'n.	5,516
U. S. Sugar Corp.	78,927
Other processors	0
	430,794

Announcement

The study of the cost of operating large sugar cane farms and sugar mills which is being conducted by the Louisiana State University will be continued for the 1940 crop year. It is expected that the field work will start about May 19. Mr. R. M. Grigsby and one or two assistants will collect records in the field. Your cooperation is again solicited as it is hoped that we will be able to publish a report about the first of September.

A Warning About Mosaic in Co. 281

By Eaton M. Summers, Assistant Pathologist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture.

(Reprinted from Sept. 1st, 1933, issue of the Sugar Bulletin)

In view of the rapid increase in acreage of Co. 281 throughout the sugar district of Louisiana, it seems advisable to issue a warning at this time concerning its mosaic hazard. This valuable variety is becoming rather severely infected with mosaic in many sections, so much so in fact that the disease should not be further disregarded by planters in the selection of seed cane. Mosaic is apparently to be considered a more serious hazard in this variety than in the P.O.J. varieties which, although rather seriously affected, were able to combat the disease over a series of years by a tendency to recover and establish healthy cane from diseased seed or stubbles. To date, Co. 281 has shown practically no tendency to recover from the disease which means that each new infection represents a permanent increase of the mosaic percentage in any field or in subsequent plantings from such seed. It is, therefore, conceivable that in certain sections of the state all fields of this variety might eventually become completely diseased which would, as shown by replicated yield comparisons with healthy seed at the United States Sugar Plant Field Station at Houma, cause a reduction in tonnage of cane and sugar of about 20 percent under the yields hitherto obtained from healthy seed of this variety. This reduction is attributable to poorer germination of the mosaic seed pieces or stubbles and to stunting of growing mosaic plants in the field.

It is obvious that where possible something should be done to avoid such probable losses connected with the expanding acreage of this variety. The logical procedure is to examine at once all fields that might be used for seed and take only those fields, or parts of fields, that show the least mosaic. This may in some instances entail a slightly longer haul of seed cane, but the greater yields from healthy seed will much more than compensate the extra expense. This simple procedure can at least be followed on a number of properties where there are now scattered fields of Co. 281, in which examination has revealed a variation in the amount of mosaic ranging from practically zero to more than 80 per cent. The higher percentages are often along the bayous or near other grassy areas.

Where fields, containing no more than 5 percent mosaic, must be used for seed, it is believed it would also pay to first cut down the mosaic stools to avoid their use as seed and thus reduce mosaic spread next summer in the new plantings. It may be advisable in the future (with further knowledge about mosaic spread in Co. 281) to provide seed plots in which the mosaic stools could be destroyed or rogued out at regular intervals of one to two weeks throughout the growing season by a man trained to distinguish the mottling in the leaves characteristic of mosaic. By successive increase of such healthy seed stocks, it may be possible to hold down the percentage of infection in commercial fields, as accomplished in other countries where valuable varieties prove susceptible to mosaic.

Washington News

(By C. J. Bourg)

Refining in Bond

The Department of Agriculture announced on the extremely early date of May 6th that refining in bond will be permitted in 1941. This practice has little interest for the continental producer, except when it is done in December. In the first place, the new-crop sugar, produced in continental areas is just coming on the market in the last quarter of each year, and in the past years the sale of over-quota sugars in December has had a depressing effect on the price for Louisiana raw sugar. The announcement states that, "Over-quota sugar may be released under bond by collectors of customs for refining and return to customs' custody within thirty days, or within any longer period that the Department may establish." Continental areas are naturally very much interested in the suggestion that a period longer than thirty days may be allowed.

When a refiner secures permission to taks offshore raw sugar from customs' custody and refine it, he agrees to return an equivalent amount of sugar within thirty days to customs' custody. The thirty-day period has made it possible in years prior to 1940 for refiners to buv over-quota sugars in the beginning of December, refine them, and distribute the refined sugar to the consumers. Then in January, new quota sugars could be used to return an equivalent amount to the customs. In this way, the quota system has been actually violated; but the claim is made that it is in the public interest to avoid any squeeze or local sugar shortage at the end of the calendar year, when most areas have already exhausted their quotas and sugars may be held by speculators. However, the suggestion of a period longer than thirty days means to us that the December situation might be extended to include the Fall season of the year, in which event over-quota sugars could almost completely nullify the advantages of the quota system.

Of course, the practice of refining in bond may have advantages from the standpoint of storing sugars in the United States instead of leaving them in the warehouses of offshore areas. In this period of emergency, there may be occasion for taking advantage of any available shipping space to transport sugar to United States ports; but, as long as there is no suspension of quotas, the continental industry is very much concerned about any practice which may have the effect of undermining the quota system.

***

Information on Prices of Farm Products

There was a defense conference on consumers' goods held in Washington recently, attended by several hundred producers and distributors from all over the country. The purpose was mostly to offer an opportunity for the exchange of ideas as to the distribution of consumers' goods and as to price regulation within reasonable bounds. The question of price control came up several times, and there was an evident desire on the part of producers and distributors alike to have the public informed on the reasons for price advances. It was accepted as necessary to a better understanding that the reasons for rising costs should be explained

to the Government, and by the Government, in turn, to the retailers and to the consumers.

From the standpoint of agriculture, Mr. Milo Perkins of the Department of Agriculture brought out the fact that while 25% of our population is composed of farmers, only 11% of our national income goes to these farmers. He recommended that there should be closer adjustment of the income ratio. President Ed O'Neal of the American Farm Bureau Federation advocated parity prices for agricultural products as the best means of removing the disadvantages suffered by the farmers. It was generally agreed that consumers must be educated to the proposition of paying better prices for farm products. The subject of sugar was mentioned by several of the speakers, and your Washington Representative took occasion to point out that there had been several statements issued by different Government officials on sugar prices in recent weeks, but such statements did not contain the most important information from the standpoint of the domestic producer—which is that the price levels of sugar have gone up in practically the same progression as that of ocean freight rates. In the case of Cuba, the rates have increased from a normal 12c to 50c and over; and, in the case of the Philippines, from a normal of 30c to more than $1.50. It is true that rather vague references were made to shipping shortages, but no information was furnished to counteract the impression that the domestic sugar industry had caused the increase in price. Consumers are entitled to know and should be told why the price of a commodity like sugar takes a jump, in the face of what is referred to by Government officials as ample supplies. Unless the consumer understands this, his conclusion is too often inclined to complaints about profiteering in the producing industry. The trade papers all recognize these facts, but very few consumers or retailers are informed on the subject. The record of the domestic sugar industry has been that when domestic production increases, the price of sugar to the American consumer decreases; therefore, it is very important to this usually misunderstood industry that when increases in the price occur, the real facts should be made known to the public.

Announcement of Important Meeting

There will be a joint meeting of the Contact Committee of the American Sugar Cane League and the Agricultural Section of the Louisiana Sugar Cane Technologists Association at the U. S. Sugar Plant Field Station, Houma, on Thursday, June 5, beginning at 9:30 A. M. All members of these organizations as well as others interested in the Louisiana sugar cane industry are cordially invited to attend.

The program will consist of brief talks by various members of the Houma station staff on the work in progress at the station, and a paper on tractor implements by a cane grower. In addition, those attending will have an opportunity to tour the experimental fields of the station, and to see some 25,000 new seedling cane varieties in the preliminary stages of testing. It should be of interest to all connected with the industry to become acquainted with the process through which new varieties pass before they reach the plantation test field stage.

Aconitic Acid in Sediment and Scale in Louisiana Sugar Houses* †

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Agricultural Chemical Research Division
Bureau of Agricultural Chemistry & Engineering
U. S. Department of Agriculture

In recent years the western district of the Louisiana sugar belt has been troubled with a cream-colored sediment which precipitated from first and second molasses and sometimes from sirup. Factories in other sections, as it happened, have had less trouble. The sediment appeared more abundantly in the process when the pH of clarified juice was above 6.2. This condition has been accompanied by rapid fouling of heating surfaces and has been experienced not only by raw factories but also by a refinery which encountered unusual scaling of the coils of white sugar pans. The refinery trouble would indicate that portions of sediment were occluded in the raw sugar crystal.

Purification and Analysis

An investigation has been made of objectionable scale and sediment samples collected in 1938 and 1939. Sediment containing adhering molasses was made into a slurry with an equal weight of 50% ethyl alcohol and dried on a funnel with suction. This operation was repeated three times, and the cake was then washed with 50% alcohol until the filtrate was only faintly colored. The cake was dried for 15 hours at 70° C. and 28″ vacuum, passed through a 50-mesh screen, and dried 5 hours longer under vacuum. The 1938 and 1939 samples of refinery scale, which required less washing, were treated in a similar manner.

On a dry basis the sediments and scales for the two seasons showed the following composition:

	Molasses Sediment		Refinery Scale	
	1938	1939	1938	1939
Silica	2.35	3.58	0.85	1.24
Oxides of Fe & Al	0.78	0.66	1.90	6.68
Calcium Oxide	15.66	13.58	6.45	10.28
SO_3	4.08	1.25	12.62	14.93
P_2O_5	0.13	trace	1.10	2.82
MgO	9.78	11.98	17.02	13.38
Loss on ignition	64.64	65.21	50.56	50.98

The high loss on ignition indicated that the material possibly consisted largely of an organic compound of calcium and magnesium. An elemental analysis proved the absence of nitrogen, organic sulfur and halogens.

To free the organic acids, forty grams of the dry material was heated with 65 ml. of conc. HCl and 80 ml. of water until most of the sediment went into solution. Upon cooling, some material insoluble in the cold precipitated out which was filtered off. The filtrate was extracted with ethyl ether, the ether evaporated, and a large residue of a highly acid organic compound obtained. Several solvents were tried for purifying this organic acid, with the result that it was found to be slightly soluble in cold, but highly

*Presented at the meeting of the American Chemical Society, Detroit, Mich. Sept. 8-13, 1941, and released by the Society for publication in The Sugar Bulletin. A similar paper was published in Industrial and Engineering Chemistry, vol. 33, No. 5, pp. 637-640 (May, 1941).

†Contribution No. 161, from the Carbohydrate Unit, Agricultural Chemical Research Division, Bureau of Agricultural Chemistry and Engineering, U. S. Department of Agriculture.

soluble in hot, concentrated acetic acid, making this the most satisfactory solvent. After one recrystallization the acid melted with decomposition at 183° to 184° C. Four or five crystallizations from acetic acid gave a pure white crystalline compound which did not change appreciably on further purification.

Identification and Properties

Repeated purification of this organic acid gave a product which was soluble in water, alcohol, acetone and ether, melting with decomposition at 191.5° C. (uncorrected), as against the same melting point for purified aconitic acid made by the method of Bruce[1]. A mixed melting point of aconitic and the unknown acid did not deviate from 191.5° C. (uncorrected). The neutralization equivalent was found to be 58.55 both for the unknown and for aconitic acid. A saturation test made by E. K. Nelson of this Division, using potassium permanganate, showed the organic acid to be unsaturated. The unknown organic acid accordingly appeared to be aconitic. Further proof of its identity as aconitic acid was obtained by preparing the p-nitrobenzyl, phenacyl and p-phenylphenacyl esters of this acid and of synthetic aconitic acid, and by comparing the melting points and other properties of the corresponding esters[2]. The respective esters proved to have the same melting points and showed no deviation in melting point when mixed.

Pan and Evaporator Scale

The two samples of scale obtained during 1938 and 1939 from the coils of a refinery white sugar pan, the composition of which scale has been given above, were acidified, filtered, washed and extracted with ether in the same manner as for the molasses sediment. A high percentage of crystalline aconitic acid was obtained. Evaporator scale obtained from the last body of the effects of a factory experiencing trouble with sediment during the 1939 season was next examined, aconitic acid being obtained, but in a less pure state and smaller percentage than from the refinery pan scale. Calcium aconitate has thus been found to be an important constituent of evaporator scale and sugar house sediments.

Table 1 shows the percentages of pure aconitic acid found in the various materials based on the weight of dry sample.

Table 1
ACONITIC ACID CONTENT OF SEDIMENT AND SCALES

Material	Aconitic Acid in 1938 Samples	Aconitic Acid in 1939 Samples
	%	%
Calcium Aconitate Sediment	56.21	57.44
Refinery Pan Scale	25.56	24.48
Evaporator Scale	-----	8.15

Test for Detection of Aconitic Acid in Sediments and Scales

As a result of testing a number of sediments from sugar house products and various scale deposits from evaporators and pans, it was found that a short test, simpler than that of Taylor's[3], was sufficient to detect aconitic acid. This simplified test is carried out as follows: To approximately 3 mg. of the washed dry substance to be tested add 4 drops of concentrated acetic acid and heat gently over a low flame until one-half or more of the acetic acid is volatilized; this is to free the aconitic acid if present. After cooling add 1 to 2 ml. of acetic anhydride and again carefully boil over a low flame with constant shaking. Boil gently for approximately two minutes. If aconitic acid is present, the mixture first turns pink, then the color deepens to magenta and finally to a reddish-purple or claret. With pure aconitic acid the color changes further through green to brown.

Aconitic acid, when contaminated with a large quantity of impurities, does not pass through the green stage. A drop of pyridine added after the acetic anhydride, as recommended by Fürth[4], speeds the color changes in the test and makes heating at this stage unnecessary. The color tints, however, are slightly more reddish. This is a very sensitive test for detecting aconitic acid, as the addition of only two or three crystals of the acid when the test is negative is sufficient to produce the color reactions.

Aconitic Acid Content of Louisiana Sirups

In attempting to account for the more pronounced occurrence of the aconitate sediment in one section of the sugar belt, it was decided to test sirups representative of juices from some of the present commercial cane varieties in Louisiana.

The results have confirmed the findings of Yoder[5], Zerban[6], and others, working with the older varieties of cane, that practically all the crystalline acid present in the ether extract was aconitic acid. Estimation of the approximate aconitic acid content of various unlimed sirups and sugar house products was carried out according to the following procedure: 400 grams of sirup of known solids content was diluted and treated with a suitable quantity of dry lead subacetate, agitated and allowed to stand two hours before filtering and washing. The acid was freed from the precipitate obtained with H_2S, and the resulting solution and washings were concentrated under high vacuum and made up to 200 ml. volume. Twenty ml. of this solution was used for titration and pH determination, and the remaining 180 ml. extracted with ethyl ether for 18 hours, using an improvised automatic extractor similar to that used by Yoder[4]. The ether extract solution was dehydrated with calcium chloride, with careful subsequent washing with ether, which rendered certain dark extracted material insoluble. The dehydrated extract, after evaporation to dryness, gave a buff-colored crystalline residue. This was extracted and washed with benzene, in order to remove traces of wax and other soluble matter, dried at 70° C. and 28″ vacuum, and weighed. A weighed portion of it was titrated with standard alkali and the acid present calculated as aconitic acid, using the neutralization equivalent 58.55.

Table 2 shows the average aconitic acid content per 100 parts of sirup solids and the pH of the acid solution before extraction, when sirups from Co. 290 cane from different localities were tested. Titration of aliquots of the acid solutions before and after extraction disclosed that an average of 61.7 per cent of the original titrated acidity was extracted by the ether and that 42.1 per cent could be accounted for as aconitic acid. The 38.3 per cent of titrated acidity remaining after extraction was found to be principally phosphoric and sulfuric acids.

Table 2
ACONITIC ACID CONTENT OF SIRUPS FROM Co. 290 CANE

District	pH of Solution before Extraction	Grams of Aconitic Acid per 100 Sirup Solids
Red River	1.27	0.853
Bayou Lafourche	1.13	0.880
Mississippi River	1.43	0.904
Western	1.51	1.250
St. Francisville	1.76	1.330

Table 3 shows results obtained by extracting

sirups made from Co. 290 and C. P. 29/320 cane grown in the same immediate localities.

Table 3
COMPARISON OF ACONITIC ACID CONTENT OF SIRUPS FROM Co. 290 and C. P. 29/320 SUGARCANE

District	pH of Solution before Ether Extraction		Grams of Aconitic Acid per 100 Sirup Solids	
	C.P. 29/320	Co. 290	C.P. 29/320	Co. 290
Miss. River	1.33	1.43	0.759	0.904
Western	1.20	1.51	0.930	1.250
Red River	1.30	1.27	1.010	0.853

Aconitic Acid Content of Louisiana Final Molasses

Two samples of final molasses from the district experiencing most trouble with the sediment were extracted for aconitic acid. Sample A was obtained from a raw sugar factory which clarified its juices at around 6.2 pH in order to minimize trouble with sediment, and sample B from a factory carrying its defecated juice around 6.8 pH. In each of the samples the calcium aconitate was present both in suspension and in solution. The suspension that would not go into solution with moderate dilution was filtered off, acidified, and added to the solution to be extracted. Sample A showed 2.52 per cent aconitic acid on solids, as against 1.80 per cent for sample B.

Discussion of Results

The samples of acid isolated from the various substances studied in this investigation were found to have identical properties, coinciding with those of the more stable "trans" isomeric form of aconitic acid. The melting point obtained for this acid depended on purity, dryness of product and rate of heating. Purification was accomplished by recrystallization from glacial acetic acid, and the technic of introducing the capillary at approximately 10 to 12 degrees and 4 to 5 minutes before the melting point temperature was reached was adopted for the determination of melting point.

The color reactions of aconitic acid with acetic anhydride, which are sensitive and useful in detecting its presence, show strong evidence that the presence of traces of impurities, such as calcium, sodium and potassium, is responsible for the color changes produced. The purer the acid, the less perceptible the color changes and the more rapidly the color passes to the green stage.

Tri-calcium aconitate, when freshly formed in the cold, is very soluble in cold solution. If, however, it is heated to 90°-100° C., it becomes only slightly soluble, soon precipitates, and has the property of adhering tenaciously to anything with which it comes in contact. Sugarhouse products holding calcium aconitate in solution becomes supersaturated by concentration or by extraction of sugar and reboiling. The exact stage of precipitation apparently depends on the original concentration in the juice and the pH of clarification. The most promising means of dealing with the sediment difficulty in raw sugar factories at present appears to be clarification of juices high in aconitic acid at a pH of 6.2-6.4, where less of the tri-calcium aconitate is formed or is more soluble and remains in solution. The use in combination with lime of a clarifying agent whose aconitic acid salts are more soluble might also prove advantageous. Clarification at a low pH is already being practiced with considerable apparent success in eliminating the occurrence of the sediment. This practice is, no doubt, accompanied by some sacrifice in non-sugar elimination and a slight increase in inversion of sucrose, and due to varying characteristics of the juice it may be more practical in some sections than others.

Since a scale high in aconitic acid content appears on refinery pan heating surfaces, it is obvious that relatively considerable quantities of calcium aconitate are present in raw sugar. In order to reach the refinery pans, the aconitate must be dissolved at the melters and pass through the carbon filters in solution. Concentration in refinery liquors forces precipitation and subsequent fouling of heating surfaces.

The preliminary data presented in Tables 2 and 3 are not considered of sufficient scope to permit further conclusions. The aconitic acid content of juices tested was much higher than has been reported previously, and there are indications that it varies with soil conditions and variety of cane. However, the aconitic acid content in different sirup samples from Co. 290 grown in the same district varied between 0.8 and 1.65 per cent on solids. There appeared to be some correlation between percentage juice extraction and aconitic acid content, with sirup from cane ground on heavier mills usually running higher in aconitic acid content. It was not possible to distinguish between sirups made from plant cane and those from ratoon cane, which also may account for some of the variations.

Observations in the factory have caused some operators to associate the sediment trouble with Co. 290 cane, and more especially with plant cane. The comparative data presented by Fort and McKaig[7], in which it was shown that Co. 290, while lowest in total organic non-sugars, was found to be highest in organic acid salts, tend to substantiate factory observations and the results of this investigation. However, it would be necessary to compare the aconitic acid content of Co. 290 cane with that of several other varieties, using more standard conditions, before definite conclusions can be reached.

Since the proportion of aconitic acid in juice is usually higher than that of P_2O_5, being in many cases three times as much, and also since it behaves somewhat similarly when neutralized with lime, its effect on clarification has doubtless been underestimated. As aconitic acid gives trouble in Louisiana through delayed precipitation, more data should be obtained on methods for eliminating this acid in clarification. The advisability of examining poor clarifying juices from certain cane varieties for high aconitic acid content is also suggested, as this may lead to improved factory methods of handling poor quality cane and in addition give sugars of improved refining quality.

It seems possible that the value of calcium and magnesium aconitates, which may be recovered from sugar-house sirups as by-products of sugar and sirup manufacture, may compensate for the expense of elimination. Certain derivatives of these organic salts, such as aconitic, itaconic, citraconic, and mesaconic acids, are expensive and are in demand for use as plasticisers and modifiers in the plastics and lacquer industries.

Acknowledgments

The authors wish to acknowledge with thanks and appreciation the laboratory facilities and general cooperation supplied by the Department of Chemical Engineering, Louisiana State University, and, in particular, the assistance rendered by Dr. A. G. Keller

of that Department. Thanks are extended to Mr. E. K. Nelson, Agricultural Chemical Research Division, Bureau of Agricultural Chemistry and Engineering, U. S. Department of Agriculture, who made the saturation test on aconitic acid.

References Cited

1. Bruce, W. F., Org. Syntheses, 17, 1 (1937).
2. McCalip, M. A., and Seibert, A. H. Industrial & Engineering Chemistry, 33, No. 5. pp. 637-40 (May, 1941).
3. Taylor, C. S., J. of the Chem. Soc., 115, 886 (1919).
4. Furth, O., and Herrmann, H., Biochem, Z., 280, 488-57 (1935).
5. Yoder, P. A., J. Ind. Eng. Chem., 3, 640-46 (1911).
6. Zerban, F. W., J. Ind. Eng. Chem., 11, 1034 (1919).
7. Fort, C. A., and McKaig, Nelson, Jr., U. S. D. A. Tech. Bull. 688 (1939).

Announcement of Meeting

The annual meeting of the Manufacturing Section of the Louisiana Sugar Cane Technologists Association will be held on Thursday, June 12, 1941 at 9:30 A.M. in the Auditorium of the Experiment Station at Houma, La.

A number of papers on subjects of interest to those engaged in the manufacture of sugar will be presented, and it is planned to have open discussion on any point brought out by these papers.

The program as outlined will consist of papers on the following subjects:

Stream Pollution by a member of that section of the Conservation Department.

A discussion on lubrication in sugar factories by Mr. Hugh C. Garrett, Lubrication Engineer for the Magnolia Petroleum Company.

Mechanical Harvesting by Mr. Frank Vought, South Coast Corporation.

Recovery of wax from filter press mud by Mr. R. T. Balch, Senior Chemist, Experiment Station, Houma, La.

The use of natural gas in sugar factories, by Mr. Edwin Dennis, of the Louisiana State University Sugar School.

Handling of low grade massecuites by W. S. Daubert, Cinclare Central Factory.

A cordial invitation to attend the meeting and take part in the discussion is extended to all interested in sugar manufacture.

W. S. Daubert
Chairman Manufacturing Section

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THE SUGAR BULLETIN

Entered to the second-class of mail matter April 13, 1925 at the post office at New Orleans, La., under Act of March 3, 1879

We stand for the encouragement of Home Industries as against Foreign Competition

Vol. 19 NEW ORLEANS, LA., JUNE 15, 1941 No. 18

Can the Smuggling of the New Variety Seed Canes Be Worth the Threat That It Is to the Continuance of the Louisiana Sugar Industry?

May 31, 1941

Mr. Marcel J. Voohries,
General Manager,
American Sugar Cane League,
407 Carondelet Street,
New Orleans, Louisiana.
Dear Mr. Voorhies:

This will acknowledge receipt of your letter of May 28 in which you request an article on the danger of unauthorized importation of sugarcane varieties into Louisiana. It occurs to me that a reprinting of the appended article written several years ago by T. E. Halloway and R. D. Rands, which specifies many of the dangers involved in such importation, will serve the purpose in part. The paper emphasizes that there is a Louisiana quarantine law restricting the importation of sugarcane into that State, as well as the Federal law prohibiting the movement from all foreign countries into the United States of living sugarcane. Under appropriate authority sugarcane planting material may be introduced for scientific purposes.

Considering the fact that chlorotic streak was surreptitiously brought in by some unauthorized means after the publication of this paper it is well to again remind the sugar fraternity of Louisiana of these realistic dangers. The past warning has proved prophetic in the light of subsequent events. The future costs of controlling chlorotic streak cannot even be estimated but they will be considerable. Chlorotic streak was obviously brought to Louisiana from a foreign country, but there are pests and diseases of sugarcane in continental United States not currently reported in Louisiana. In particular, the eye-spot of sugarcane, *Helminthosporium Sacchari* (v. Breda de Haan) Butler, and the West Indian sugarcane mite, *Tarsonemus bancrofti* Michael, exist in Florida, but as far as we know do not now occur in Louisiana. Damage from eye-spot and from the mite vary widely with local conditions and varieties but both are capable of causing material damage.

Sugarcane varieties bred in Florida can be tested in Louisiana by appropriate and legal means and have been so tested for many years past. In view of that fact it is hard to understand why individuals persist in exposing their fellow planters to the hazards of additional plant diseases and insect pests by improperly controlled and even unauthorized introductions. We can only point out these dangers. It is up to the cane industry itself and the State authorities to provide effective deterrents. I hope you will find it possible to reprint the attached article in full.

Very truly yours,
E. W. Brandes
E. W. Brandes,
Had Pathologist in Charge.

SUGARCANE INSECT PESTS AND DISEASES WITH SPECIAL REFERENCE TO UNITED STATES PLANT QUARANTINES*

By T. E. Holloway, U. S. Bureau of Entomology, New Orleans, La., and R. D. Rands, U. S. Bureau of Plant Industry, Washington, D. C.

ABSTRACT

Insects and diseases likely to be introduced in shipments of sugarcane are mentioned, together with measures designed to prevent their introduction.

*Paper read before the Section on Plant Quarantine and Inspection at the 44th Annual Meeting of the American Association of Economic Entomologists at New Orleans, La., December, 1931.

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When the Secretary of the Section on Plant Quarantine and Inspection kindly proposed that the authors write a paper on this subject, he suggested that sugarcane pests and diseases be discussed with special reference to those made the subject of plant quarantines. A very superficial examination, however, not only of United States but of foreign literature, showed that in plant quarantine regulations few specific diseases and fewer insects are mentioned. This may or may not be unusual, but it appears that the officials of the various countries were wise in making the quarantines broad enough to cover all undesirable insects and diseases.

In regard to state quarantines, the states of Arizona, Florida, Georgia, Louisiana, and Mississippi have promulgated quarantine laws specifically restricting the importation of sugarcane, and California has a law restricting the importation of certain plants from Hawaii, which would include sugarcane.

The regulations of Florida, Georgia, and Mississippi were adopted specifically on account of the mosaic disease at a time when the distribution of this disease was not completely known: at any rate it has since been found in all three states. The regulations of Arizona (adopted Nov. 15, 1923) and of Louisiana (effective Jan. 1, 1928) are general regulatory measures likewise designed to prevent the introduction of pests and diseases from other states, while that of California (effective June 24, 1911) apparently from its wording would also exclude sugarcane from Hawaii due to the danger of introducing the Mediterranean fruit fly.

As to the United States, two national quarantines have been promulgated on sugarcane; Quarantine No. 15 (Foreign) announced June 6, 1914, prohibits the movement from all foreign countries into the United States of living canes of sugarcane or cuttings or parts thereof; and No. 16 (Domestic) which is essentially the same as No. 15, relates to the movement of sugarcane from the territories of Hawaii and Porto Rico. While these quarantines make no specific provision for the shipment to the United States of sugarcane for scientific or other purposes, the Plant Quarantine and Control Administration has for a number of years administratively permitted such introductions provided they were addressed to the Inspection House of the Plant Quarantine and Control Administration, and were grown in the quarantine greenhouse at Arlington Farm, Va., and not removed therefrom unless certified by inspectors of the Administration to be apparently free from injurious insects and plant diseases. Under these restrictions, the United States Department of Agriculture has brought into the country a number of valuable foreign sugarcane varieties without any of the pests and diseases known to be present in the countries of their origin.

Foreign importations are handled by the Department with many precautions. The system may be found described at length in published papers, but it may be mentioned here that after thorough inspection and fungicidal and insecticidal treatment, the importations are first grown under observation for two vegetative generations in the insect-proof greenhouse at Arlington Farm, Va., before any cuttings or "seed" are shipped to the main cane-growing states. A number of other sugarcane-producing countries have similar quarantine stations, often likewise remote from their cane areas, for the observation of varieties officially introduced.

With these introductory remarks, we may proceed to a discussion of foreign insects and diseases which are a potential hazard to the domestic sugarcane industry.

Sugarcane Insects. In considering how sugarcane insect pests may enter a new country, we must take into account the manner of shipping seeds and cuttings. Sugarcane is, of course, not grown from true seed except for the purpose of originating new varieties. The seeds are minute in size, and with due inspection and fumigation the few insects which they might harbor should easily be eliminated. The cuttings are more difficult to handle. In all commercial plantings and in most experimental ones sections of the stalk are planted. These are ordinarily planted with the leaf-sheaths adhering to the stalks to protect the lateral buds or "eyes." In shipping cane from country to country, however, these leaf-sheaths should be carefully removed, the cuttings should be inspected, and it would be advisable to wash them in a strong solution of fish-oil soap.

It will be seen that with these practices the cuttings should be received practically free of insects. The soil insects can not be present, because no soil is shipped. The leaf insects are likewise absent, as the cuttings are freed of both leaves and leaf-sheaths.

The dangerous insects can only be the species which live within or on the stalk. There are a number of boring moth and weevil larvae, and these are especially to be feared. The larger larvae make holes in the stalks which almost pass unnoticed in a large pile of sugarcane, but which are readily observed when a stalk-by-stalk examination is made. The holes made by smaller larvae are not so easily noticed. The moths deposit their eggs on the leaves, but the weevils insert theirs into the stalk, and it is difficult to say with confidence that a weevil egg is positively not present. The precaution of growing the cane for a while at quarantine stations is therefore very desirable.

A brief review of the principal pests of sugarcane may be worth while. The most injurious pest, considering the many countries which it infests, is undoubtedly the moth borer, *Diatraea saccharalis* F. This, or closely related species, is distributed in all the sugarcane-producing regions of North, South, and Central America and the West Indies. Borers of the same genus occur in Java, India, and elsewhere in the East. The eggs are deposited on the leaves, but practically the entire larval and pupal life is spent in tunnels in the stalk made by the larvae. The adult moth force their way out of the stalk, and soon deposit more eggs. The boring of the stalk destroys the sugar-producing tissues of the plant. The tonnage of cane and the production of sugar are thus reduced. In Louisiana, it has been estimated that the annual loss is about one-fifth of the crop. The borer not only destroys cane on its own account, but it allows the entrance of diseases (such as red rot) which cause a further reduction of sugar. The moths fly, but the principal mode of distribution to new areas is in the moving of sugarcane by human agencies. It might be mentioned that in Louisiana it has been found that soaking the cane for 20 minutes in water at 50° C. will ordinarily kill all borer larvae and pupae. The excep-

tions were hibernating larvae, which were not all killed. In other words, the treatment was not quite perfect when conducted during the winter season.

The weevil stalk borers are somewhat similar in habit. Their eggs are deposited in the stalk instead of on the leaves, and with this exception their life histories are about the same as those of the moths. Weevil borers occur both in the Eastern and the Western Hemispheres. The most noteworthy of the stalk-boring weevils is the sugarcane borer of Hawaii, *Rhabdocnemis obscura* Boisd. Uncontrolled, its damage was similar to that of the moth borers. As is well known, however, it was in great part controlled by the introduction of the tachinid fly, *Ceromasia sphenophori* Vill., from New Guinea.

Other insects damage the stalk without boring into it. Such are the mealybugs of several species, a few scales, and some moth larvae called bud worms, which feed on the "eyes," or buds, and on the rind of the stalk. The mealybugs and scales injure the cane, of course, by sucking out the juice. Careful inspection and washing the cuttings in an insecticidal solution should eliminate such pests from shipments.

Descending to the roots, we find a number of species of white grubs, especially in Porto Rico. One species (*Phytalis smithi* Arrow) was once transported from Barbados to Mauritius in the soil around potted sugarcane plants. It became established in Mauritius and has since been very troublesome.

Other soil insects are the root weevils of the West Indies (*Diaprepes abbreviatus* L. and others in the same genus). These weevils injure not so much the roots as the rootstocks of sugarcane. One larva has been said to be sufficient to kill a stool of sugarcane.

Quarantine regulations may of course prevent the shipment of soil, and thus soil insects may easily be eliminated in shipments of sugarcane.

As to leaf insects, there are pests both of the gnawing and the sucking kinds. There are several aphids, including the corn leaf aphid (*Aphis maidis* Fitch), which transmits mosaic disease. Another is the woolly aphid (*Oregma lanigera* Zehnt.) of Java. It is reported that sums of from two to four thousand dollars are spent annually by some planters in the control of this pest. Since large spraying machines can not move about in the dense cane fields, the application of insecticides must be made by hand or with small machines.

There are a few scale insects and these and the leafhoppers suck the juice out of the leaves. An introduced leafhopper (*Perkinsiella saccharicida* Kirk.) in Hawaii has been controlled by introduced parasitic insects, but it is questionable whether it could be controlled as easily in some other country. Even in Hawaii, large areas of sugarcane were destroyed and the sugar industry was threatened with ruin before the leafhopper was brought under subjection.

Then there are several caterpillars, including the southern grass worm or fall army worm (*Laphygma frugiperda* S. & A.), which eat the leaves.

It will be noticed that two Hawaiian insects mentioned have been largely controlled by introduced parasites. This should not lead to the assumption that even if a pest becomes introduced, it can easily be controlled in this way. The parasites were brought to Hawaii at considerable trouble and expense, after great damage to the crop had been suffered, and while achieving commercial control, they do not entirely eradicate the injurious insects.

Sugarcane insects have been largely transported by human agencies, and hence it seems reasonable to hope that with adequate inspection and quarantine, their introduction might be completely prevented. In other words, if sugarcane is allowed to enter a country only through official channels, there is little likelihood of the introduction of injurious insects. What is to be feared most is possible importations of sugarcane made by unauthorized persons, such as planters, and even the smuggling of sugarcane by laborers or others going from place to place. Such unofficial action may result in the establishment of serious pests, both insects and diseases.

Sugarcane Diseases. All of the sugarcane diseases now present in the continental United States have, so far as known, apparently long existed here, or were imported with variety introductions before the establishment of the national quarantines. During approximately 150 years following the first introduction of the sugarcane (in 1751), many foreign varieties were imported and of course but few diseases as such were recognized, much less their cause and means of spread. The wonder is that so few came in. The more important of these are the mosaic which from 1918 to 1926, in conjunction with a series of unfavorable seasons, brought the Louisiana industry to near ruin; root diseases due to various causes; the red rot of the stalk and seed cuttings, caused by the fungus *Colletotrichum falcatum*, Pokkah bong, or top distortion caused by *Fusarium moniliforme;* and the bacterial red stripe (*Phytomonas rubrilineans*).

Unlike many of the insect pests, the cane diseases as a rule can not be detected by mere inspection of the cuttings. Furthermore many of them are not destroyed in cuttings by the soaking in water at 52° C. for 30 minutes, which in most cases kills insects. The diseases are only manifested after the cuttings are sprouted and even then they may sometimes lie dormant in the growing plant, particularly of tolerant varieties, for many months before any outward signs appear. Therefore, in order to avoid the introduction of diseases, the planting material imported from foreign countries by the federal government is, when possible, selected by a pathologist in the country of origin and upon arrival in the United States is again inspected, fumigated, and treated in hot water, and then, as above mentioned, is grown for an extended period in insect-proof greenhouses far removed from any fields of sugarcane.

Foreign Diseases. Although new diseases are continually being reported, particular vigilance should be observed in preventing the establishment here of the following well-known ones the dangerous character of which has been repeatedly demonstrated in various foreign countries. These are sereh, Fiji disease, streak, leaf scald, gummosis, downy mildew, smut, and rust, which may now be briefly described. The fact is emphasized that every one of these major diseases (as well as several minor ones not mentioned) may be introduced with stalk cuttings the mere inspection of which in many cases would not reveal their presence.

Sereh (cause unknown) was noted in Java as early as 1882 and in a few years spread over the entire island, causing perhaps the most devastating cane-disease epidemic in the history of the industry. It has since given trouble in Formosa. In severe form it prevents elongation of the stalks, resulting in a bunchy growth resembling the "sereh" grass of the East Indies from which it derives its name. The plants do not recover so the growing of ratoon crops was abandoned. The disease is transmitted by infected cuttings in which it is often manifested by reddish bundles in the joints as well as profuse aerial roots on the standing stalks. It was finally controlled in Java by an expensive rejuvenating procedure involving production of seed cane in mountain nurseries, and more recently by steeping seed cane in water at 52° C. for 30 minutes, and particularly the breeding of resistant varieties. The P.O.J. varieties 36, 213, 234, and 2725 now grown in the United States are known to be highly resistant to sereh.

Fiji disease (cause unknown) occurs in Fiji, Australia, the Philippines, and New Guinea, and is potentially a more serous hazard to uninvaded countries than sereh owing to the susceptibility of the great majority of commercial sugarcane varieties. It eventually causes a severe dwarfing of the plant but the most characteristic symptom is the presence of minute elongated galls on the under side of the leaves. Diseased seed gives rise to diseased plants but secondary infections often remain latent for long periods without observable symptoms. It is controlled by roguing out diseased plants and by the planting of resistant varieties.

Streak (a virus disease) has only been known since 1925, when it was reported on the Uba variety in South Africa; it has since been identified in Egypt, Mauritius, and Inda. Streak belongs to the mosaic type but is transmitted from plant to plant by a leafhopper, and results in broken chlorotic lines or stripes on the leaves instead of the mottling characteristic of mosaic. Its importance lies in the susceptibility of varieties of the Chinese type, like Uba, which are very resistant to mosaic. Streak has been intercepted in the Washington quarantine greenhouse on variety importations from India.

Leaf scald (*Bacterium albilineans* Ashby) and gummosis (next considered) have much in common as bacterial vascular diseases. Scald has been reported from Java, Australia, Fiji, Formosa, and the Philippines, and is considered one of the most destructive diseases of sugarcane. In the chronic form, particularly in case of semi-resistant varieties, it has been known to lie dor-

mant for long periods before the characteristic narrow white streaks appear on the leaves. In the acute phase whole plants may suddenly wilt and die when the leaves present a scalded appearance. The disease is transmitted by infected seed cane, contaminated cane knives, and possibly by insects. It attacks a majority of the more valuable cane varieties and where resistant ones can not be substituted, expensive direct control methods, as roguing, isolation of seed plots, etc., are necessary. Scald has also been intercepted in Washington on seed-cane importations from the Orient.

Gummosis (*Bacterium vascularum* (Cobb) Greig-Smith) occurs in Australia, Mauritius, Porto Rico, St. Kitts, Brazil, and Colombia. Its presence in the Western Hemisphere makes it a particularly serious menace to the domestic sugar industry. Fortunately most of our present varieties are known to be resistant and all new ones developed in the future should be tested in Porto Rico or other places for their reaction to this disease which, owing to multiplicity of communications between this country and the West Indies, may be accidentally introduced at any time. Gummosis is recognized by characteristic yellowish-brown leaf stripes which follow the vascular bundles, and a reddening of the stalk tissues in the joints. In severe infections yellowish gum will exude from the cut ends of diseased stalks and even pockets of gum may be found on splitting the cane. This gum causes much trouble and heavy sucrose losses in the factory. Considering the early introductions of varieties in Louisiana it is remarkable that this disease has not also been imported.

Downy mildew (*Sclerospora sacchari* Miy.) has been reported from Fiji, Australia, and Formosa, where it often causes serious losses on poor or badly tilled land and especially on poorly drained soils. It is most destructive to ratoon crops. It is readily recognized by the whitening of the upper surfaces of the leaves, which later turn brownish and often split, giving a shredded appearance. Occasional plants are stimulated to abnormal elongation as if they were about to arrow and these stand out like flags above the rest of the field. Millions of spores are formed on the surfaces of the leaves and are readily blown by the wind, spreading the disease with great rapidity during warm rainy periods. It is controlled by the use of resistant varieties and by seed selection and roguing.

Smut (*Ustilago scitaminea* (Rab.) Syd.) has been reported to occur in Formosa, the Philippines, Java, Queensland, Mauritius, India, Natal, and British Guiana. It is particularly destructive to the slender canes of India, from one of which our P. O. J. varieties were derived, and one of the latter (P. O. J. 36) was so severely damaged in that country that it had to be discarded. Varieties of the Chinese type, to which our syrup-producing variety Cayana belongs, are also susceptible as well as a few varieties of the so-called "Noble," or tropical, type. Infected plants are severely stunted, the terminal bud later developing a smut whip made up of a black mass of spores which are readily scattered by the wind. The disease is also carried by infected cuttings and, although its symptoms are easily detected, its rapid means of spread and the known susceptibility of our commercial varieties makes it a serious menace to the domestic sugar industry.

Rust (*Puccinia kuhnii* (Kr.) Butl.) is apparently limited to Australia, Fiji, Formosa, Java, the Philippines and India. It causes minute, yellowish, elongated spots on the leaves where the spores are formed and may be scattered by the wind. It attacks a wide diversity of varieties including the wild cane, *Saccharum spontaneum*. Extensive damage by rust has been rare, but its potentialities have been demonstrated in Fiji on certain seedlings.

In addition to the above there are a large number of so-called minor diseases which have not been observed in the United States. Although of little importance abroad, our varieties might prove more susceptible and these diseases become of major importance if introduced here.

Bagasse as a Carrier of Insects and Diseases. The fibrous material which is left after the juice is pressed out of sugarcane stalks is called bagasse. This is an article of increasing importance in commerce. It is now being manufactured into wall board and has been used experimentally at least for several other purposes. At least one shipload has come from Cuba to the United States. The question arises as to whether insects and diseases can survive the milling process or might otherwise be imported as accidental contaminants on the bales of bagasse.

All insects in the sugarcane stalks which pass between the many rollers of a modern sugar mill are killed. The sugarcane is not only subjected to great pressure, but the bagasse is baled for shipment. The only insects on bagasse would be those which might find their way on to it on leaving the factory and the baling press. In other words, insects might be carried on bagasse just as they might be carried on bales of hay or bales of cotton. The writers are of the opinion that the danger of introducing them is slight.

As for diseases, there is probably danger of importations in many cases, not only as contaminants on the bales of bagasse, but from actual survival from the milling process. The ordinary pressures employed would certainly not kill all the bacteria nor even fungus parasites, especially the resistant spores. Hot maceration, used by some mills, appears at first sight sufficient to destroy all life in the material, but careful examination indicates this is probably only partially effective. The considerable thickness of the bagasse blanket, its comparative dryness and therefore heat-insulating properties, and the very short time for its passage from one set of rolls to the next probably does not allow sufficient penetration of the hot water to completely eradicate disease organisms.

Conclusion. This brief review is believed sufficient to illustrate the great good fortune of our local industry in having so few of the world's destructive sugarcane insects and diseases. The rapid advancement and future prosperity of the domestic industry will depend to a great extent on our success in keeping them out. This can only be done by the strictest enforcement of the national quarantine and the closest cooperation on the part of everyone in preventing surreptitious importations of varieties. Pathologists and entomologists should be notified of suspicious disease symptoms and unfamiliar insects observed in the growing crop so that any new trouble may be quickly discovered and eradicated before it becomes permanently established and eradication is no longer possible.

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Summary of Results of Sugarcane Variety Tests During 1939

By George Arceneaux, Agronomist, R. T. Gibbens, Jr., Assistant Agronomist, and C. C. Krumbhaar, Agent, Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture*

This report summarizes briefly the results of tests of sugarcane varieties conducted by the U. S. Department of Agriculture in Louisiana during 1939. The scope of the work and the methods employed in conducting the experiments were essentially as in previous years. Average results. given in tables 1 to 5 inclusive are quite generally in agreement with ones previously obtained and published.

Extensive comparisons of Co. 290 and C.P. 29/116 on light soils place the latter approximately on a par with Co. 290 in yield of cane per acre but somewhat inferior to Co. 290 in yield of sugar per ton of cane.

Co. 281 now grown almost exclusively for windrowing purposes again proved the least productive of varieties now in extensive commercial culture. The observed average yield of sugar per acre from this variety approximating 4000 pounds below that from C.P. 29/320 and nearly 7000 pounds below that from Co. 290 in the aggregate of plant cane, first and second stubble crops emphasizes the importance of keeping the acreage devoted to Co. 281 down to minimum proportions consistent with expected windrowing requirements.

Table 1. Results of plant cane variety tests on light soils during 1939. Harvest dates November 22 to December 13, inclusive.

Variety	Southeastern Parishes (Average of three tests in Terrebonne and Lafourche Parishes)	Southwestern Parishes (Average of five tests in St. Mary, Iberia, Vermilion and Lafayette Parishes)	Northeastern Parishes (Average of two tests in Pointe Coupee and Avoyelles Parishes	Average of 10 tests
Yield of cane per acre (Tons)				
Co. 281	30.25	23.55	31.61	27.17
Co. 290	40.77	37.08	44.85	39.74
C.P. 28/11	27.92	24.42	31.91	26.97
C.P. 28/19	28.93	21.32	26.59	24.66
C.P. 29/116	42.58	37.71	48.75	41.38
C.P. 29/320	29.64	23.72	33.64	27.48
Indicated yield of 96° sugar per ton of cane (Pounds)				
Co. 281	186.3	206.0	154.0	187.3
Co. 290	178.4	188.1	132.4	172.5
C.P. 28/11	210.0	214.1	152.7	198.3
C.P. 28/19	220.0	242.1	209.1	227.2
C.P. 29/116	172.7	175.0	126.1	162.8
C.P. 29/320	202.1	213.2	168.0	198.5
Indicated yield of 96° sugar per acre (Pounds)				
Co. 281	5636	4851	4868	5090
Co. 290	7273	6975	5938	6857
C.P. 28/11	5863	5228	4873	5347
C.P. 28/19	6365	5162	5560	5603
C.P. 29/116	7353	6599	6147	6735
C.P. 29/320	5990	5057	5652	5456

Among early maturing varieties C.P. 28/19 gave consistently the highest yields of sugar per ton of cane, while C.P. 29/320 gave the highest average yield of sugar per acre in tests on light soils.

A study of the yield data assembled according to the three well recognized sections of the Sugarcane District viz, the southeastern parishes, southwestern parishes and northeastern parishes, reveals important differences in varietal performance between different sections. Co. 290 and C.P. 28/11 gave their highest, while Co. 281 and C.P. 28/19 gave their lowest relative yields of cane per acre in the southwestern parishes. C.P. 28/19 and C.P. 29/320 gave their highest and Co. 290 and C.P. 28/11 their lowest relative yields of sugar per ton of cane in the northeastern parishes.

*Resigned March 15, 1940.

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Table 2. Results of first stubble variety tests on light soils during 1939. Harvest dates November 1 to November 23, inclusive.

Variety	Southeastern Parishes (Average of three tests in Terrebonne and Lafourche Parishes)	Southwestern Parishes (Average of five tests in St. Mary, Iberia, Vermilion and Lafayette Parishes)	Northeastern Parishes (Average of two tests in Pointe Coupee and Avoyelles Parishes	Average of 10 tests
Yield of cane per acre (Tons)				
Co. 281	28.09	14.61	24.45	20.62
Co. 290	42.09	26.96	40.10	34.13
C.P. 28/11	31.31	20.02	31.56	25.71
C.P. 28/19	30.46	16.69	26.45	22.77
C.P. 29/116	43.55	25.88	45.77	35.16
C.P. 29/320	34.36	20.28	32.18	26.88
Indicated yield of 96° sugar per ton of cane (Pounds)				
Co. 281	178.5	213.1	188.5	193.2
Co. 290	176.6	206.9	170.3	187.1
C.P. 28/11	210.8	220.4	174.0	205.6
C.P. 28/19	224.2	240.3	221.5	229.5
C.P. 29/116	174.7	195.3	159.2	178.3
C.P. 29/320	204.0	221.7	197.6	209.2
Indicated yield of 96° sugar per acre (Pounds)				
Co. 281	5014	3113	4609	3983
Co. 290	7433	5578	6829	6385
C.P. 28/11	6600	4412	5491	5285
C.P. 28/19	6829	4011	5859	5226
C.P. 29/116	7608	5054	7287	6268
C.P. 29/320	7009	4496	6359	5623

Table 3. Results of second stubble variety tests on light soils during 1939. Harvest dates October 16 to October 31, inclusive.

Variety	Southeastern Parishes (Average of three tests in Terrebonne and Lafourche Parishes)	Southwestern Parishes (Average of five tests in St. Mary, Vermilion and Lafayette Parishes)	Northeastern Parishes (Average of two tests in Pointe Coupee and Avoyelles Parishes	Average of 8 tests
Yield of cane per acre (Tons)				
Co. 281	22.05	6.56	18.53	15.36
Co. 290	35.71	22.53	33.47	30.21
C.P. 28/11	22.26	17.32	25.96	21.33
C.P. 28/19	23.71	11.26	23.12	18.89
C.P. 29/116	32.25	21.16	35.57	28.92
C.P. 29/320	29.09	14.84	27.35	23.31
Indicated yield of 96° sugar per ton of cane (Pounds)				
Co. 281	171.9	214.9	165.1	176.8
Co. 290	172.8	226.1	152.1	182.0
C.P. 28/11	204.0	232.0	160.4	199.3
C.P. 28/19	211.4	243.7	201.2	215.5
C.P. 29/116	169.0	207.7	146.5	172.7
C.P. 29/320	199.3	235.2	187.7	204.5
Indicated yield of 96° sugar per acre (Pounds)				
Co. 281	3790	1410	3059	2715
Co. 290	6171	5094	5091	5497
C.P. 28/11	4541	4018	4164	4251
C.P. 28/19	5012	2744	4652	4071
C.P. 29/116	5450	4395	5211	4994
C.P. 29/320	5798	3490	5134	4766

In tests on heavy soils C.P. 29/116 equaled the standard variety Co. 290 in yield of sugar per ton of cane as well as in yield of cane per acre. C.P. 28/11 surpassed Co. 290 by an average of approximately 15 pounds of sugar per ton of cane but gave approximately 3500 pounds of sugar per acre less than Co. 290 in the aggregate of plant cane, first and second stubble crops. C.P. 28/19 proved on the whole distinctly less satisfactory than C.P. 28/11.

In plant cane tests at Houma the varieties Co. 290, C.P. 28/11, C.P. 28/19 and C.P. 29/116 planted on August 1 yielded at an average rate of approximately four tons of cane per acre and approximately 18 pounds of sugar per ton of cane more than obtained from comparable plantings made on October 1. First stubble yields were found approximately the same from plantings made at the two dates.

Table 4. Results of variety tests on heavy clay soils in Louisiana during 1939.

Variety	Plant Cane[1]			1st Stubble[2]			Second Stubble[3]		
	Average yield of cane per acre	Indicated yield of 96° sugar		Average yield of cane per acre	Indicated yield of 96° sugar		Average yield of cane per acre	Indicated yield of 96° sugar	
		Per ton of cane	Per acre		Per ton of cane	Per acre		Per ton of cane	Per acre
	Tons	Pounds	Pounds	Tons	Pounds	Pounds	Tons	Pounds	Pounds
Co. 290	28.86	186.4	5380	32.63	178.2	5815	27.70	167.5	4640
C.P. 807	25.04	190.6	4773	27.64	179.4	4959	18.92	167.6	3171
C.P. 28/11	23.54	199.9	4706	25.62	186.7	4783	19.75	192.5	3802
C.P. 28/19	16.64	217.3	3616	18.14	204.1	3702	16.94	204.1	3457
C.P. 29/103	24.57	226.5	5565						
C.P. 29/116	28.92	190.7	5515	36.00	177.7	6397	27.31	169.1	4618

[1] Average of 5 tests in the parishes of Terrebonne, Lafourche, St. Mary and Pointe Coupee. Harvest dates November 22 to December 13, inclusive.
[2] Average of 4 tests in the parishes of Terrebonne, Lafourche and Pointe Coupee. Harvest dates November 1 to November 23, inclusive.
[3] Average of 3 tests in the parishes of Terrebonne, Lafourche and Pointe Coupee. Harvest dates October 16 to October 31, inclusive.

Table 5. Results of Variety Tests on Muck Soil, Clovelly Plantation, Cut Off, La., during 1939.

Variety	Plant Cane[1] Harvested Dec. 7, 1939			1st Stubble[1] Harvested Nov. 24, 1939			Second Stubble[2] Harvested October 25, 1939		
	Average yield of cane per acre	Indicated yield of 96° sugar		Average yield of cane per acre	Indicated yield of 96° sugar		Average yield of cane per acre	Indicated yield of 96° sugar	
		Per ton of cane	Per acre		Per ton of cane	Per acre		Per ton of cane	Per acre
	Tons	Pounds	Pounds	Tons	Pounds	Pounds	Tons	Pounds	Pounds
Co. 281	35.20	164.3	5783	33.00	164.3	5422	28.54	134.0	3824
C.P. 28/11	34.20	158.2	5410	36.28	181.2	6574	34.36	166.8	5731
C.P. 28/19	33.16	210.2	6970	34.20	220.5	7541	29.30	193.1	5658
C.P. 29/320	30.60	168.5	5156	35.68	175.8	6273	33.44	164.6	5504
C.P. 33/253	36.64	170.0	6229	38.72	176.0	6815	35.96	158.2	5689

[1] Averages based on 5 determinations.
[2] Averages based on 6 determinations.

In trials on muck soil C.P. 28/19 again led all other varieties tested in yield of sugar per ton of cane as well as in yield of sugar per acre. C.P. 29/320 and C.P. 28/11 afforded on the whole cane of acceptable commercial quality but were both greatly below C.P. 28/19 in yields of sugar per ton of cane and per acre. Confirming results obtained during previous years Co. 281 did not mature satisfactorily in tests on muck soils and cannot be recommended for culture on soils of this type.

The new C.P. seedlings 29/137, 31/509, 32/206, 33/224, 33/243 and 33/253 have shown some promise in preliminary tests but more extensive field trials will have to be made before the relative merits of these seedlings can be accurately determined.

Results of Variety Tests in Louisiana During 1940

By George Arceneaux, Agronomist, Leo P. Hebert, Jr., Agronomist, and C. C. Krumbhaar, Agent.
Division of Sugar Plant Investigations, Bureau of Plant Industry, U. S. Department of Agriculture.

INTRODUCTION

Field tests of commercial sugarcane varieties and promising unreleased seedlings were repeated in Louisiana during 1940 by the U. S. Department of Agriculture in accordance with plans followed during preceding years and described in previous publications.* Results obtained are briefly discussed in this report.

Weather Conditions

Weather conditions prevailing during 1940 are considered by many to have been probably the most adverse in the history of the Louisiana Sugar Industry. As a result of a prolonged period of freezing and subfreezing temperatures between January 15 and January 31, in the course of which minimum temperatures ranging from 12° to 16° F. were recorded throughout southern Louisiana, sugarcane of all varieties was severely killed back to a level from one to three inches below the ground surface. Prevailingly cool temperatures during early spring months, deficient rainfall during the month of May

*Arceneaux, G., Gibbens, R. T., Jr. and Krumbhaar, C. C. 1939, Variety Tests of Sugarcanes in Louisiana During the Crop Year 1936-37 and Summary of Annual Results, 1935-37. U. S. Dept. Agri. Circ. 531, 27 pp. illus., and previous circulars.

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followed by excessive rains during June, July and August resulted in an abnormally retarded rate of growth. A hurricane of moderate intensity accompanied by excessively heavy rainfall during the early part of August flooded extensive areas in the Parishes of St. Martin, Iberia, Vermilion and Lafayette and caused considerable breakage in susceptible varieties throughout most of the sugar district.†

†Hebert, L. P., and Arceneaux, G. Notes on Wind Damage to Sugarcane of Different Varieties. Sugar Bull. 19 (5): 4-5 Dec. 1, 1940.

Conditions during early fall were, on the whole, favorable but standing cane was severely damaged by freezes on November 15 and 16 when minimum temperatures ranged from 22° to 24° F. Practically all buds above the ground were killed and occasionally some stalks were split. While extensive deterioration occurred following the freeze, most of the standing as well as windrowed cane remained in a millable condition until the end of harvest which in most cases was completed by late November or early December.

Table 1. Results of Plant Cane Variety Tests on Light Soils in Louisiana During 1940.

Variety	Houma (Station) Nov. 26 (a)	Godchaux (Raceland) Nov. 28	Greenwood (Thibodaux) Nov. 21	Oaklawn (Franklin) Nov. 25	Albania (Jeanerette) Nov. 20	L. J. Landry (New Iberia) Nov. 13	Roland's Farm (Erath) Nov. 15	Alma (Lakeland) Nov. 19	Rosewood (Hamburg) Nov. 18	Average
Average Yield of Cane per acre (Tons)										
Co. 281	23.1	16.2	13.1	16.2	15.7	11.6	12.7	19.7	16.7	16.11
Co. 290	35.7	29.8	25.5	23.7	28.0	20.5	19.0	35.0	23.4	26.73
C.P. 28/19	22.5	21.9	18.9	17.4	15.6	14.7	9.6	20.6	15.6	17.42
C.P. 29/103	34.2	26.1	22.7	18.1	20.7	17.0	14.8	29.7	21.9	22.80
C.P. 29/120	27.6	22.9	16.1	18.6	17.0	13.5	14.2	23.9	19.0	19.20
C.P. 29/320	25.8	20.0	19.7	15.7	17.4	12.1	10.4	22.8	16.6	17.83
Difference										
For P. = .05	1.64	1.87	3.49	3.25	2.04	2.44	2.77	3.18	2.42	1.778
For P. = .01	2.23	2.56	4.76	4.45	2.78	3.33	3.75	4.34	3.30	2.379
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)										
Co. 281	178.1	176.0	176.1	185.3	206.8	221.7	219.5	188.7	201.4	192.9
Co. 290	157.4	171.4	163.8	175.4	185.1	207.0	206.9	171.2	184.3	177.6
C.P. 28/19	201.3	186.6	187.3	216.7	224.7	254.3	230.3	213.7	220.1	211.9
C.P. 29/103	139.4	187.9	183.4	200.9	224.0	241.5	204.7	207.5	217.5	195.7
C.P. 29/120	183.8	183.1	181.4	195.5	218.1	223.6	219.3	193.3	211.2	198.5
C.P. 29/320	172.5	175.6	167.8	187.6	197.7	224.9	222.5	190.3	191.9	188.3
Difference										
For P. = .05	13.63	10.71	12.03	8.74	6.79	9.32	13.25	8.98	10.65	8.684
For P. = .01	18.58	14.60	16.40	11.92	9.26	12.71	17.96	12.24	14.53	11.619
Average Indicated Yield of 96° Sugar Per Acre (Pounds)										
Co. 281	4114	2851	2307	3002	3247	2572	2788	3717	3363	3107
Co. 290	5619	5108	4177	4157	5183	4243	3931	5992	4313	4747
C.P. 28/19	4529	4087	3540	3771	3505	3738	2211	4402	3434	3691
C.P. 29/103	4767	4904	4163	3636	4637	4105	3030	6163	4763	4463
C.P. 29/120	5073	4193	2921	3636	3708	3019	3114	4620	4013	3811
C.P. 29/320	4450	3512	3306	2945	3440	2721	2314	4339	3186	3357
Difference										
For P. = .05	476	417	659	649	446	576	630	657	534	392
For P. = .01	649	569	899	889	609	785	853	896	728	525

(a) Date of harvest.

Table 2. Results of First Stubble Variety Tests on Light Soils in Louisiana During 1940

Variety	Houma Station Nov. 6 (a)	Godchaux (Raceland) Nov. 7-8	Greenwood (Thibodaux) Nov. 6-7	Oaklawn (Franklin) Oct. 18-19	Albania (Jeanerette) Nov. 11-12	L. J. Landry (New Iberia) Nov. 12	Roland's Farm (Erath) Nov. 14	Alma (Lakeland) Oct.31-Nov.1	Rosewood (Hamburg) Oct. 29	Average
Average Yield of Cane Per Acre (Tons)										
Co. 281	16.6	18.8	17.8	9.5	12.7	4.3	5.3	14.5	19.3	13.20
Co. 290	26.0	28.2	25.9	21.8	23.2	9.7	13.3	23.1	32.7	22.66
C.P. 28/11	17.8	19.1	18.4	15.1	16.8	8.6	9.5	26.1	26.9	17.59
C.P. 28/19	19.3	22.9	17.7	7.2	13.2	3.5	4.9	19.1	18.6	14.04
C.P. 29/116	29.9	30.2	29.9	20.4	29.0	14.7	14.0	32.2	42.5	26 98
C.P. 29/320	14.0	22.2	17.9	8.8	17.7	4.7	4.3	15.7	22.2	14.17
Difference										
For P. = .05	3.60	2.47	1.33	1.83	2.01	1.56	2.23	3.00	2.63	2.46
For P. = .01	4.91	3.37	1.82	2.45	2.69	2.12	3.04	4.01	3.58	3.29
Average Indicated Yield of Sugar Per Ton of Cane (Pounds)										
Co. 281	202.8	194.0	201.5	146.0	222.6	244.3	221.6	185.2	190.2	196.9
Co. 290	184.0	192.1	195.4	157.7	217.6	237.2	203.6	175.4	168.8	188.0
C.P. 28/11	204.1	215.2	217.1	118.0	226.9	235.3	219.9	165.3	176.2	192.7
C.P. 28/19	223.1	206.1	235.6	149.5	241.3	263.0	248.8	217.1	214.4	219.4
C.P. 29/116	191.7	172.3	180.8	134.6	193.5	229.2	219.3	163.0	144.7	175.2
C.P. 29/320	197.3	205.6	213.4	131.9	217.5	236.2	222.6	184.2	179.6	196.8
Difference										
For P. = .05	9.73	5.62	8.94	9.99	8.21	7.43	9.51	6.10	8.71	9.86
For P. = .01	13.28	7.67	12.19	13.35	10.97	10.13	12.97	8.14	11.88	13.19
Average Indicated Yield of Sugar Per Acre (Pounds										
Co. 281	3366	3647	3587	1387	2827	1050	1174	2685	3671	2599
Co. 290	4784	5417	5061	3438	5048	2301	2708	4052	5520	4259
C.P. 28/11	3633	4110	3995	1782	3812	2024	2089	4314	4740	3389
C.P. 28/19	4306	4720	4170	1076	3185	920	1219	4147	3988	3081
C.P. 29/116	5732	5203	5406	2746	5611	3369	3070	5249	6150	4726
C.P. 29/320	2762	4564	3820	1161	3850	1110	957	2892	3987	2789
Difference										
For P. = .05	747	507	336	290	469	380	503	562	526	519
For P. = .01	1019	691	458	387	627	518	686	751	717	695

(a) Date of harvest.

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Table 3. Results of Second Stubble Variety Tests on Light Soils in Louisiana During 1940.

Variety	Houma Station Oct. 23 (a)	Godchaux (Raceland) Oct. 24-25	Greenwood (Thibodaux) Oct. 22-23	Alma (Lakeland) Oct. 30-31	Rosewood (Hamburg) Oct. 28	Average
Average Yield of Cane Per Acre (Tons)						
Co. 281	10.8	10.8	13.2	12.1	5.9	10.56
Co. 290	21.5	23.3	25.9	24.8	13.1	21.72
C.P. 28/11	12.5	16.0	18.4	17.9	14.2	15.80
C.P. 28/19	12.8	18.8	12.8	14.1	6.5	13.00
C.P. 29/116	21.9	27.4	27.5	27.2	18.9	24.58
C.P. 29/320	18.0	20.0	17.2	22.0	15.6	18.56
Difference						
For P. = .05	2.14	2.05	1.89	1.75	1.70	2.812
For P. = .01	2.87	2.74	2.53	2.34	2.32	3.835
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)						
Co. 281	176.3	175.9	166.3	200.3	217.0	183.8
Co. 290	169.0	169.6	172.3	188.4	218.5	180.3
C.P. 28/11	186.4	200.0	182.5	180.4	197.4	188.9
C.P. 28/19	194.9	190.9	195.9	213.0	236.7	202.1
C.P. 29/116	164.9	154.5	151.4	173.5	190.4	165.4
C.P. 29/320	185.0	183.0	171.5	196.7	213.2	189.6
Difference						
For P. = .05	7.071	6.93	7.31	8.19	4.67	11.256
For P. = .01	9.457	9.26	9.77	10.94	6.37	15.352
Average Indicated Yield of 96° Sugar Per Acre (Pounds)						
Co. 281	1904	1900	2195	2424	1280	1941
Co. 290	3633	3952	4463	4672	2862	3916
C.P. 28/11	2330	3200	3358	3229	2803	2984
C.P. 28/19	2495	3589	2508	3003	1539	2627
C.P. 29/116	3611	4233	4163	4719	3599	4065
C.P. 29/320	3330	3660	2950	4327	3326	3519
Difference						
For P. = .05	391	391	356	373	365	561
For P. = .01	524	522	476	498	498	765

(a) Date of Harvest.

Main Tests on Light Soil

Tables 1, 2, and 3 summarize results of extensively replicated variety tests on light soil at nine representative localities. It will be noted by reference to the tables that indicated yields of sugar per ton of cane, on the whole, approached normal but yields of cane per acre were unusually low. In interpreting the results obtained in this and other series of tests described later it should be borne in mind that observed varietal trends may not be entirely representative because of the abnormally adverse weather conditions.

Results obtained with the recently released varieties C.P. 29/103 and C.P. 29/120, which appeared in plant cane tests only, are of special interest. C.P. 29/103 proved inferior to Co. 290 in yield of cane by an average difference of approximately 4 tons per acre. However, it surpassed Co. 290 by approximately 18 pounds of sugar per ton of cane, and averaged less than 300 pounds below Co. 290 in indicated yield of sugar per acre. These yield relationships were fairly well maintained in individual tests except at the Houma Station where C.P. 29/103 was 18 pounds below Co. 290 in yield of sugar per ton of cane. C.P. 29/120 was insignificantly higher than C.P. 29/103 in average yield of sugar per ton of cane but was lower than C.P. 29/103 in 7 out of the 9 tests. It was significantly below C.P. 29/103 in yields of cane and sugar per acre in the majority of individual tests and in the average of all tests. C.P. 29/103 and C.P. 29/120 both significantly surpassed C.P. 29/320 in average indicated yield of sugar per acre and gave higher indicated yields of sugar per ton of cane. C.P. 29/103 was significantly better than C.P. 28/19 in yield of sugar per acre.

For the first time since the two varieties have been in comparative tests C.P. 29/116 proved distinctly superior to Co. 290 in yield of cane per acre on light soils with average differences of nearly 3 tons per acre in second stubble tests (table 3) and more than 4 tons per acre in first stubble tests (table 2). Co. 290 showed its usual advantage over C.P. 29/116 in yield of sugar per ton of cane but averaged, on the whole, below C.P. 29/116 in yield of sugar per acre. The two varieties were not compared in plant cane tests.

Among other notable trends maintained in the 1940 tests might be mentioned the relatively poor showing made by C.P. 28/19 and especially C.P. 29/320 as compared with the control variety Co. 281. For instance, in the average of plant cane, first and second stubble tests during the period 1935-39 inclusive C.P. 28/19 surpassed Co. 281 in sugar per acre by an average of 1080 pounds as contrasted with an average difference of only 584 pounds during 1940. In similar tests during 1938 and 1939, C.P. 29/320 yielded at the rate of 1530 pounds of sugar per acre more than Co. 281 as compared with a difference of only 673 pounds during 1940. The failure of these two varieties to maintain their previously displayed superiority to Co. 281 was especially pronounced in first stubble tests in which their average yields of cane per acre differed but slightly from the average yield obtained with Co. 281.

Results of tests summarized in tables 1 to 3, inclusive, may be grouped as follows in accordance with well recognized subdivisions of the Sugarcane District: Southeastern parishes—Houma, Raceland, Thibodaux; southwestern parishes—Franklin, Jeanerette, New Iberia, Erath; northeastern parishes—Lakeland, Hamburg.

In plant cane tests (table 1) varietal yield trends were not highly variable from section to section. It is considered worthy of note, however, that the newly released variety C.P. 29/103 gave the best relative yields in the northeastern parishes where it surpassed Co. 290 by an average difference of more than 300 pounds of sugar per acre in contrast with average differences of approximately 300 pounds and 500 pounds in favor of Co. 290 in the southeastern and southwestern sections, respectively.

In first stubble tests (table 2) the best relative yields of sugar per acre from Co. 281, C.P. 28/19, and C.P. 29/320 were obtained in the southeastern parishes and the poorest in the southwestern parishes. The superiority of C.P. 29/116 to Co. 290 in yield of sugar per acre was especially marked in the northeastern parishes in spite of the former's relatively low average yield of sugar per ton of cane in that section.

In second stubble tests (table 3) C.P. 28/19 gave decidedly better relative yields of sugar per acre in the southeastern parishes than in the northeastern parishes while the opposite was true in the case of C.P. 29/320.

Tests on Heavy Soils

Tables 4 and 5 summarize results of plant cane and stubble tests on heavy soils. In each of three plant cane tests and in the single first stubble test C.P. 29/103 outyielded Co. 290 in indicated sugar per acre and gave a significantly higher indicated yield of sugar per ton of cane. C.P. 29/103 surpassed C.P. 28/11 by 15 pounds of sugar per ton of cane and nearly 1,000 pounds of sugar per acre in the average of three plant cane tests and by approximately 20 pounds of sugar per ton of cane and nearly 300 pounds of sugar per acre in the one first stubble test. C.P. 29/120 approximately equaled C.P. 29/103 in yield of sugar per ton of cane but fell consistently below the latter in yields of cane and sugar per acre.

Confirming results obtained during previous years on soils of this type, C.P. 29/116 surpassed Co. 290 in yields of cane and sugar per acre, and gave an indicated yield of sugar per ton of cane but slightly below that from Co. 290 in the average of all tests. C.P. 28/11, C.P. 28/19, and C.P. 807 gave their usual inferior yields of cane and sugar per acre as

compared with Co. 290.

Tests on Muck Soil

Confirming results of previous tests on muck soil, C.P. 28/19 again proved superior to all other released varieties in indicated yields of sugar per ton of cane and sugar per acre as shown by results summarized in table 6. The unreleased seedling C.P. 33/253 slightly exceeded C.P. 28/19 in yield of sugar per acre in the first and second stubble tests but was inferior in the plant cane test. C.P. 33/253, while affording cane of very satisfactory sugar content, was consistently inferior to C.P. 28/19 in indicated yield of sugar per ton of cane in each of the tests.

Table 4. Results of Plant Cane Variety Tests on Heavy Soils in Louisiana During 1940.

Variety	Greenwood (Thibodaux) Nov. 21 (a)	Oaklawn (Franklin) Nov. 25	Alma (Lakeland) Nov. 29	Average
Average Yield of Cane Per Acre (Tons)				
Co. 290	12.3	26.3	37.1	25.2
C.P. 807	14.7	17.3	29.5	20.5
C.P. 28/11	11.4	16.5	30.5	19.5
C.P. 29/103	13.7	21.9	34.0	23.2
C.P. 29/116	18.2	23.6	38.0	26.6
C.P. 29/120	12.7	17.7	27.4	19.3
Difference				
For P. = .05	2.44	2.41	6.39	
For P. = .01	3.33	3.28	8.84	
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)				
Co. 290	145.1	140.6	162.9	152.5
C.P. 807	136.6	145.5	159.5	150.1
C.P. 28/11	166.7	163.4	175.6	170.1
C.P. 29/103	188.5	177.5	188.7	185.1
C.P. 29/116	153.0	153.7	160.6	156.8
C.P. 29/120	186.3	175.8	189.6	184.4
Difference				
For P. = .05	12.20	11.00	8.081	
For P. = .01	16.65	15.00	10.933	
Average Indicated Yield of 96° Sugar Per Acre (Pounds)				
Co. 290	1785	3698	6044	3842
C.P. 807	2008	2517	4705	3077
C.P. 28/11	1900	2696	5356	3317
C.P. 29/103	2582	3887	6416	4295
C.P. 29/116	2785	3627	6103	4172
C.P. 29/120	2366	3112	5195	3558
Difference				
For P. = .05	432	446	1138	
For P. = .01	589	609	1574	

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Table 5. Results of Stubble Variety Tests on Heavy Soils in Louisiana During 1940.

Variety	First Stubble					Second Stubble		
	Houma, Station August Planting Oct. 31 (a)	Houma, Station October Planting Oct. 31	Oaklawn (Franklin) Oct. 18-19	Alma (Lakeland) Oct. 31	Average	Greenwood (Thibodaux) Oct. 22	Alma (Lakeland) Oct. 30	Average
Average Yield of Cane Per Acre (Tons)								
Co. 290	10.7	9.1	17.8	10.0	11.9	12.2	5.4	8.8
C.P. 807	----	----	9.8	3.3	----	3.5	1.8	2.6
C.P. 28/11	8.7	9.4	10.7	14.4	10.8	5.8	5.9	5.8
C.P. 28/19	5.2	2.5	4.8	5.5	4.5	3.7	1.9	2.8
C.P. 29/116	11.3	11.3	15.4	16.1	13.5	15.0	8.2	11.6
C.P. 29/103	----	----	----	14.4	----	----	----	----
C.P. 29/320	4.8	3.7	----	----	----	----	----	----
Difference								
For P. = .05	2.20	1.72	2.57	3.30	3.63	1.86	2.35	----
For P. = .01	3.09	2.41	3.60	4.69	5.21	2.60	3.29	----
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)								
Co. 290	206.6	204.7	168.4	170.9	184.5	197.3	186.8	194.1
C.P. 807	----	----	141.9	161.5	----	165.6	177.7	173.1
C.P. 28/11	211.7	210.3	142.4	179.7	183.6	186.4	170.9	180.0
C.P. 28/19	226.9	227.1	158.6	199.2	200.2	213.3	187.9	204.6
C.P. 29/116	204.4	208.3	153.1	176.1	182.5	177.2	188.5	181.2
C.P. 29/103	----	----	----	199.9	----	----	----	----
C.P. 29/320	193.3	200.7	----	----	----	----	----	----
Difference								
For P. = .05	13.84	13.75	11.05	16.97	12.869	11.97	25.77	----
For P. = .01	19.40	19.28	15.49	24.13	18.489	16.79	36.13	----
Average Indicated Yield of 96° Sugar Per Acre (Pounds)								
Co. 290	2211	1863	2998	1709	2195	2407	1009	1708
C.P. 807	----	----	1391	533	----	580	320	450
C.P. 28/11	1842	1977	1524	2588	1983	1081	1008	1044
C.P. 28/19	1180	568	761	1096	901	789	357	573
C.P. 29/116	2310	2354	2358	2835	2464	2658	1546	2102
C.P. 29/103	----	----	----	2879	----	----	----	----
C.P. 29/320	928	743	----	----	----	----	----	----
Difference								
For P. = .05	473	377	414	624	703	362	440	----
For P. = .01	663	529	580	887	1011	507	617	----

(a) Date of harvest.

Table 6. Results of Variety Tests on Muck Soil at Clovelly Farms During 1940.

Variety	Plant Cane			First-year Stubble			Second-year Sutbble		
	Av. yield of cane per acre (Tons)	Av. indicated yield of 96° sugar		Av. yield of cane per acre (Tons)	Av. indicated yield of 96° sugar		Av. yield of cane per acre (Tons)	Av. indicated yield of 96° sugar	
		Per ton (Pounds)	Per acre (Pounds)		Per ton (Pounds)	Per acre (Pounds)		Per ton (Pounds)	Per acre (Pounds)
Co. 281	10.0	111.4	1114	28.6	163.6	4679	25.1	163.3	4099
C.P. 28/11				31.0	150.4	4662	25.4	173.3	4402
C.P. 28/19	14.0	157.2	2201	28.1	206.0	5789	24.8	217.1	5384
C.P. 29/320	8.3	125.7	1043	22.5	175.2	3942	23.7	176.0	4171
C.P. 33/243	16.7	123.8	2067						
C.P. 33/253	11.7	145.5	1702	32.5	195.4	6350	31.9	177.5	5662
Significant difference									
For P. = .05	2.78	12.11	397	4.09	8.07	765	2.25	9.21	475
For P. = .01	3.89	16.98	556	5.74	11.32	1072	3.16	12.91	666

Preliminary Tests of New Seedlings

Seedlings showing sufficient promise at the Houma Station are placed in tests on cooperating plantations. Because of relatively large numbers involved and limited facilities available for the work, preliminary plantings are ordinarily limited to three or four replications on plots of 1/80 acre. Tables 7, 8, and 9 summarize results of preliminary seedling tests during 1940.

Results of such tests on individual plantations are subject to much larger experimental errors than are the more extensively replicated tests of the principal series previously discussed but average results, which are ordinarily based on twenty or more replications, are believed to afford a reliable indication of the comparative adaptability of individual seedlings under conditions of the Sugar Belt as a whole.

Table 7. Results of Preliminary Plant Cane Variety Tests in Louisiana During 1940.

Variety	Godchaux (Raceland) Nov. 28 (a)	Greenwood (Thibodaux) Nov. 21	Oaklawn (Franklin) Nov. 25	Albania (Jeanerette) Nov. 20	L. J. Landry (New Iberia) Nov. 13	Roland's Farm (Erath) Nov. 15	Alma (Lakeland) Nov. 19	Rosewood (Hamburg) Nov. 18	Average
Average Yield of Cane Per Acre (Tons)									
Co. 281	16.9	15.1	10.1	20.1	13.8	10.3	21.6	18.7	15.82
C.P. 29/137	26.5	20.4	16.9	27.2	19.3	15.5	24.0	23.7	21.69
C.P. 31/509	28.5	20.8	17.6	27.5	22.1	13.1	33.3	25.6	23.56
C.P. 32/206	21.9	18.4	15.1	19.6	14.9	12.3	24.5	20.4	18.39
C.P. 32/324	27.3	16.9	17.1	22.4	16.0	16.0	24.4	18.3	19.80
C.P. 33/233	24.7	17.2	12.5	25.3	16.1	11.9	28.0	21.1	19.60
C.P. 33/243	23.9	17.3	16.7	26.7	17.7	13.1	25.1	21.7	20.27
C.P. 33/253	26.5	22.0	20.3	23.1	17.6	12.0	26.8	20.0	21.04
C.P. 33/372	24.9	21.6	17.3	24.4	19.5	15.1	22.3	18.9	20.50
C.P. 33/409	23.9	19.2	17.2	22.5	14.9	14.1	27.3	19.6	19.84
C.P. 34/79	29.1	18.0	20.9	22.4	16.7	17.5	25.9	22.8	21.66
Difference									
For P. = .05	5.85	6.68	4.78	3.20	2.69	3.97	2.89	2.90	1.98
For P. = .01	7.95	9.08	6.54	4.35	3.65	5.40	3.93	3.94	2.63
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)									
Co. 281	166.6	177.1	186.7	204.2	233.7	215.7	187.7	199.0	195.2
C.P. 29/137	154.1	161.8	201.5	184.3	216.9	207.4	181.4	182.2	183.7
C.P. 31/509	166.9	169.2	186.2	186.9	206.2	185.5	171.5	176.1	179.8
C.P. 32/206	178.9	190.3	204.9	218.8	226.3	206.7	187.9	195.0	199.1
C.P. 32/324	169.0	183.0	207.7	196.5	225.8	231.4	190.1	194.2	196.8
C.P. 33/233	133.6	130.4	168.8	151.8	183.9	179.3	131.4	140.1	148.1
C.P. 33/243	186.0	182.2	212.1	195.9	216.5	196.3	189.1	206.8	197.4
C.P. 33/253	175.3	193.9	210.4	198.1	226.3	224.2	190.8	196.8	198.9
C.P. 33/372	188.2	182.1	208.8	201.2	221.9	202.8	183.6	188.5	196.0
C.P. 33/409	167.6	177.4	188.2	191.5	234.0	213.2	185.9	191.9	190.8
C.P. 34/79	215.7	193.9	216.6	224.1	240.5	258.5	203.5	214.0	219.3
Difference									
For P. = .05	16.19	14.29	20.36	10.82	9.76	12.66	8.61	10.68	8.41
For P. = .01	22.00	19.43	27.83	14.72	13.26	17.21	11.70	14.52	11.16
Average Indicated Yield of 96° Sugar Per Acre (Pounds)									
Co. 281	2816	2674	1886	4104	3225	2222	4054	3721	3088
C.P. 29/137	4084	3301	3405	5013	4186	3215	4354	4318	3984
C.P. 31/509	4757	3519	3277	5140	4557	2430	5711	4508	4237
C.P. 32/206	3918	3502	3094	4288	3372	2542	4604	3978	3662
C.P. 32/324	4614	3093	3552	4402	3613	3702	4638	3554	3896
C.P. 33/233	3300	2243	2110	3841	2961	2134	3679	2956	2903
C.P. 33/243	4445	3152	3542	5231	3832	2572	4746	4488	4001
C.P. 33/253	4645	4266	4271	4576	3983	2690	5113	3936	4185
C.P. 33/372	4686	3933	3612	4909	4327	3062	4049	3563	4018
C.P. 33/409	4006	3406	3237	4309	3487	3006	5075	3761	3786
C.P. 34/79	6277	3490	4527	5020	4016	4524	5271	4879	4750
Difference									
For P. = .05	1095	1226	1026	686	626	867	579	604	419
For P. = .01	1488	1666	1402	934	851	1181	786	820	556

(a) Date of Harvest.

Table 8. Results of First Stubble Preliminary Sugarcane Variety Tests in Louisiana During 1940.

Variety	Godchaux (Raceland) Nov. 8 (a)	Greenwood (Thibodaux) Nov. 6	Oaklawn (Franklin) Oct. 19	Albania (Jeanerette) Nov. 11	L. J. Landry (New Iberia) Nov. 12	Roland's Farm (Erath) Nov. 14	Alma (Lakeland) Oct.31-Nov.1	Rosewood (Hamburg) Oct. 29	Average
Average Yield of Cane Per Acre (Tons)									
Co. 281	19.9	20.7	9.9	11.6	4.7	3.1	16.3	17.7	12.99
C.P. 29/137	29.6	24.1	15.3	19.6	9.6	4.3	14.0	26.0	17.81
C.P. 31/509	24.7	25.3	10.8	18.8	12.8	7.2	15.7	35.6	18.86
C.P. 32/134	24.8	18.5	14.0	12.8	8.7	3.1	18.7	22.0	15.32
C.P. 32/202	21.3	22.0	15.6	9.9	8.3	3.5	15.7	24.0	15.04
C.P. 32/206	23.1	22.7	18.0	16.9	9.7	5.9	17.6	26.7	17.57
C.P. 32/324	22.9	18.4	10.0	15.9	4.5	1.9	8.1	24.5	13.27
C.P. 33/224	19.2	22.7	13.6	13.6	8.3	7.9	6.5	9.9	12.71
C.P. 33/243	21.3	21.2	11.5	21.3	8.8	4.5	15.2	18.1	15.24
C.P. 33/253	26.7	23.2	14.4	20.5	10.7	7.3	22.1	25.2	18.76
Difference									
For P. = .05	4.80	3.89	5.03	4.95	3.35	2.30	7.49	6.00	3.20
For P. = .01	6.58	5.33	6.90	6.80	4.60	3.16	10.26	8.24	4.25
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)									
Co. 281	197.3	205.9	157.6	226.3	250.6	227.9	195.5	199.5	201.8
C.P. 29/137	200.0	200.1	158.4	215.4	237.4	228.5	189.9	190.0	198.3
C.P. 31/509	190.0	204.6	119.4	204.3	227.8	220.5	158.8	173.4	186.7
C.P. 32/134	211.1	220.9	167.0	221.8	242.8	246.3	189.0	179.5	202.8
C.P. 32/202	174.6	174.4	128.8	191.6	199.7	214.8	151.5	148.3	164.6
C.P. 32/206	210.1	206.8	155.2	220.2	242.6	239.5	185.2	190.1	200.3
C.P. 32/324	193.4	198.6	155.9	225.0	246.9	232.4	181.2	176.0	193.6
C.P. 33/224	202.3	203.7	136.4	225.6	240.0	218.3	183.7	184.5	198.3
C.P. 33/243	196.6	218.0	136.9	219.3	239.0	218.3	187.3	196.1	201.2
C.P. 33/253	216.8	217.8	151.0	225.5	246.3	240.9	197.7	190.8	207.9
Difference									
For P. = .05	14.97	10.72	16.23	15.35	8.82	26.31	12.78	8.95	7.42
For P. = .01	20.51	14.68	22.24	21.08	12.09	36.04	17.50	12.26	9.86
Average Indicated Yield of 96° Sugar Per Acre (Pounds)									
Co. 281	3926	4262	1560	2625	1178	706	3187	3531	2622
C.P. 29/137	5920	4822	2424	4222	2279	983	2659	4940	3531
C.P. 31/509	4693	5176	1290	3841	2916	1588	2493	6173	3521
C.P. 32/134	5235	4087	2338	2839	2112	764	3534	3949	3107
C.P. 32/202	3719	3837	2009	1897	1658	752	2379	3559	2476
C.P. 32/206	4853	4694	2794	3721	2353	1413	3260	5076	3520
C.P. 32/324	4429	3654	1559	3577	1111	442	1468	4312	2569
C.P. 33/224	3884	4624	1855	3068	1992	1725	1194	1827	2521
C.P. 33/243	4188	4622	1574	4671	2103	982	2847	3549	3067
C.P. 33/253	5789	5053	2174	4623	2635	1759	4369	4808	3901
Difference									
For P. = .05	1025	838	774	1112	806	546	1391	1125	651
For P. = .01	1404	1148	1064	1527	1107	751	1905	1545	865

(a) Date of harvest.

Table 9. Results of Second Stubble Preliminary Variety Tests in Louisiana During 1940.

Variety	Godchaux (Raceland) Oct. 24-25 (a)	Greenwood (Thibodaux) Oct. 22-23	Alma (Lakeland) Oct. 30-31	Rosewood (Hamburg) Oct. 28	Average
Average Yield of Cane Per Acre (Tons)					
Co. 281	9.4	9.4	10.6	5.1	8.62
C.P. 29/99	15.1	12.5	16.7	7.5	12.95
C.P. 29/137	17.3	17.9	14.6	12.6	15.60
C.P. 31/509	20.5	20.2	17.9	16.0	18.65
C.P. 32/202	11.4	13.2	12.6	8.8	11.50
C.P. 33/243	6.4	10.4			
Difference					
For P. = .05	2.79	2.56	4.00	2.04	2.39
For P. = .01	3.94	3.61	5.47	2.79	3.35
Average Indicated Yield of 96° Sugar Per Ton of Cane (Pounds)					
Co. 281	166.9	170.2	202.4	223.9	187.2
C.P. 29/99	200.0	172.5	203.7	239.0	200.2
C.P. 29/137	176.2	167.6	184.9	220.8	184.7
C.P. 31/509	164.7	161.8	184.7	200.0	176.2
C.P. 32/202	150.9	145.0	153.8	183.2	156.2
C.P. 33/243	218.5	197.4			
Difference					
For P. = .05	15.43	10.89	13.46	15.49	12.08
For P. = .01	21.78	15.36	18.40	21.18	16.94
Average Indicated Yield of 96° Sugar Per Acre (Pounds)					
Co. 281	1569	1600	2145	1142	1614
C.P. 29/99	3020	2156	3402	1792	2592
C.P. 29/137	3048	3000	2700	2782	2882
C.P. 31/509	3376	3268	3306	3200	3287
C.P. 32/202	1720	1914	1938	1612	1796
C.P. 33/243	1398	2053			
Difference					
For P. = .05	530	447	783	469	468
For P. = .01	749	631	1070	641	657

(a) Date of harvest.

Of the 14 seedlings included in preliminary plantation tests during 1940, the following have given evidence of satisfactory windrowing qualities in tests conducted by J. I. Laurtizen:* C.P. 29/99, 29/137, 32/206, and 34/79. These may therefore be regarded as possible competitors of Co. 281. C.P. 34/79, which appeared in the plant cane series only (table 7) outyielded Co. 281 by average differences of 24 pounds of sugar per ton of cane and nearly 1700 pounds of sugar per acre. In a preliminary first stubble test at the Houma Station (results not shown in tables) C.P. 34/79 outyielded C.P. 28/19 by 14 pounds of sugar per ton of cane and approximately 300 pounds of sugar per acre. In tests by E. V. Abbott at Houma, results of which have not been published, C.P. 34/79 proved moderately susceptible to red rot and in test by Edgerton† it was found extremely susceptible to red rot when artificially inoculated. This weakness has not been extensively reflected in plant cane stands. It should be mentioned incidentally that 1941 stubble stands of C.P. 39/79 are extremely poor.

In agreement with results during previous years C.P. 29/137 surpassed Co. 281 in average yield of sugar per acre but was, on the whole, rather consistently below Co. 281 in yield of sugar per ton of cane.

C.P. 32/206 surpassed Co. 281 in yield of sugar per acre by an average of nearly 600 pounds in plant cane tests and nearly 900 pounds in first stubble tests with an approximately equal yield of sugar per ton of cane.

In each of four second stubble tests C.P. 29/99 was significantly better than Co. 281 in yield of sugar per acre and consistently gave better yields of sugar per ton of cane. In previous plant cane and stubble tests C.P. 29/99, while frequently somewhat lower in sugar per ton of cane, rather consistently outyielded Co. 281 in yield of sugar per acre. However, the extreme susceptibility of this variety to red rot as revealed in laboratory tests‡, and to a certain extent in field tests, is considered a serious and probably disqualifying, weakness.

C.P. 32/134, 32/324, 33/224, 33/243, 33/253, 33/372, and 33/409 are approximately in a class with Co. 281 in yield of sugar per ton of cane. C.P.

*Unpublished results of deterioration studies at U. S. Sugar Plant Field Station, Houma, Louisiana.

†Report to Contact Committee of American Sugar Cane League January 21, 1941.

‡Summers, E. M., Rands, R. D., and Abbott, E. V. Disease resistance tests. Sugar Bull. 17 (No. 1, Oct. 1), pp. 30-32. 1938.

33 243 was very satisfactory as plant cane but not highly satisfactory as first and second stubble. In second stubble tests the average yield of cane per acre from C.P. 33/243 was slightly lower than that from Co. 281, though the yield of sugar per acre was slightly higher. C.P. 33/253 gave very satisfactory results in both plant cane and first stubble tests. A very severe form of mosaic is spreading in the variety (5) and this may greatly impair its future yield capacity. C.P. 32/324 gave very good yields of cane and sugar per acre in plant cane tests, but gave disappointing results in first stubble tests. C.P. 33/372 and C.P. 33/409, which were included in plant cane tests only, outyielded Co. 281 by approximately 900 and 700 pounds of sugar per acre respectively. C.P. 32/134, in first stubble tests, outyielded Co. 281 by an average difference of approximately 500 pounds of sugar per acre. C.P. 33/224 averaged slightly under Co. 281 in yields of cane and sugar per acre.

C.P. 31/509, with an average yield of sugar per ton of cane approximately 14 pounds below that from Co. 281, outyielded Co. 281 in sugar per acre by differences of approximately 1100 pounds in plant cane tests, 900 pounds in first stubble tests, and 1600 pounds in second stubble tests.

C.P. 33/233 (table 7) and C.P. 32/202 (tables 8 and 9) gave very poor results, especially as regards average yields of sugar per ton of cane and per acre, and may apparently be eliminated from further consideration.

In view of the promise shown in these and previously conducted preliminary tests it is believed that several of the varieties not yet released for commercial culture may prove exceedingly valuable. This applies especially to certain ones which have given evidence of satisfactory windrowing qualities. It is felt, however, that more extensive agronomic and pathological tests will have to be conducted before any of these varieties can be recommended for extensive commercial culture.

Sugar Cane Test Field Report Season of 1940

By C. B. Gouaux, Louisiana State University and Agricultural and Mechanical College Agricultural Experiment Stations, Dr. C. T. Dowell, Director

INTRODUCTION

The sugar cane variety work of the Louisiana Experiment Station at the eight test fields was completed with the usual good cooperation of the test field cooperators; including plantation owners, managers, overseers, factory superintendents, engineers and chemists. The short crop and the extremely unfavorable weather conditions from the beginning to the end of the 1940 season did not lessen the enthusiasm and interest in sugar cane variety work at the test fields. This made it possible to successfully complete the important part of our program, consisting of the harvesting, weighing and big-mill testing of the fall plant cane, first and second stubble varieties on a total of twenty-five experiments, during the interval of October 27 to November 29, 1940. The nine fall plant cane test fields were all harvested and milled during a period of two weeks, following the severe killing freezes of November 14-16.

The Experiment Station test fields were worked by the cooperators under their regular field system practiced in the commercial production of sugar cane for sugar. There was no special or extra attention given to these fields, and in every instance they were treated like the regular plantation fields. The planting of test fields, harvesting, weighing and big-mill testing of varieties, and the sampling of varieties for small mill testing, were all conducted under the supervision of the Experiment Station.

The fall plant cane fields were planted following a heavy crop of soybeans turned under, and without application of commercial fertilizer. The first and second stubble fields were all fertilized early in the spring with readily available nitrogen at the rate of approximaetly forty pounds per acre.

In the series of eight tables, Nos. 1 to 8 inclusive, the field results and chemical data are presented for each of the eight variety fields. Tables "A" and "B" furnish data and information on the amount of rainfall and distribution, and the minimum temperatures for the months of January, February, April and November, during the season of 1940 at the test fields. The notes at the bottom of each table give information on time of planting, harvesting dates, cultural treatments, etc.

Fall Planting of Test Fields

During the early fall season, September 18 to October 10, 1940, the regular test field variety plantings were made at each of the eight locations. Main plot plantings consisted of the following varieties: C. P. Nos. 28-19, 29-320, 29-103, 29-120, 34-79, 33-310 and 33-243. In the Teche and western sections, these same varieties were used in the main plots together with Co. 290 and C.P. 29-116, and the latter was also used in the Sharkey soil planting at Cinclare.

Introductory small plot plantings were made of the following varieties, with seed cane furnished by the Experiment Station: C.P. Nos. 34-53, 34-54, 34-75, 34-86, 34-92, 34-115, 34-139, 34-120 and 31-551. In addition, small plots were also planted of the following varieties from previous test field introductions: C.P. Nos. 34-1, 34-21, 33-409, 33-372 and 33-425. All of the available seed cane of the promising variety, C.P. 34-120, was planted on an increased basis at each test field.

The promising unreleased variety, C.P. 33-243, was also planted on an increase basis at all of the test fields. In addition, increase plantings were also made of C.P. 34-79 and increases of C.P. 33-310

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were made at Shirley, Cinclare and Billeaud test fields.

Tabulated Data and Results

The tabulated data gives the calculated normal juice for each variety, the calculated field yield expressed in tons per acre, the value per ton and per acre, and the "balance column", which is derived by deducting a uniform (tons per acre x $1.00 harvesting expense) from the per acre value, and represents the per acre money value of the variety.

In the evaluation of the varieties in tables Nos. 1 to 8 inclusive, all of the calculations are based on the regular "Louisiana Sugar Cane Contract," with basis of 11-1/2 to 12-1/2 percent sucrose in normal juice. A cost figure of $1.00 per ton was taken as a basis for total harvesting expenses. An average price of $2.66 per ton for standard cane was used in all calculations. This figure was derived from the average ($2.88) of twelve weekly 96 test raw sugar quotations, for the period of October 17, 1940 to January 2, 1941, of the Sugar and Rice Exchange and the Cane Products Trade Association, Inc., of New Orleans, Louisiana.

TABLE No. 1—CINCLARE TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Per Ton	Value Per Acre	Less $1 Harvest	Balance
Fall Plant Cane—Yazoo Soil								
C.P. 34-79	15.47	13.21	85.39	25.84	$2.85	$73.64	$25.84	$47.80
C.P. 33-243	14.31	11.76	82.18	28.44	2.66	75.65	28.44	47.21
C.P. 28-19	14.76	11.51	77.98	27.65	2.66	73.55	27.65	45.90
C.P. 29-103	15.86	11.96	75.41	26.28	2.66	69.90	26.28	43.62
C.P. 29-120	14.70	11.61	78.98	22.58	2.66	60.06	22.58	37.48
C.P. 29-320	14.12	10.89	77.12	27.61	2.34	64.61	27.61	37.00
C.P. 31-529	14.70	11.01	74.90	25.96	2.40	62.30	25.96	36.34
Co. 270	13.92	10.49	75.36	27.26	2.12	57.79	27.26	30.53
Fall Plant Cane—Sharkey Soil								
C.P. 33-243	14.27	11.79	82.62	13.03	2.66	34.66	13.03	21.63
C.P. 29-103	15.53	12.13	78.11	11.11	2.66	29.55	11.11	18.44
C.P. 33-224	14.18	10.83	76.38	12.83	2.30	29.51	12.83	16.68
C.P. 29-120	14.18	11.40	80.39	9.02	2.61	23.54	9.02	14.52
C.P. 31-529	14.08	10.83	76.92	10.00	2.30	23.00	10.00	13.00
C.P. 28-11	14.27	10.89	76.31	9.47	2.34	22.16	9.47	12.69
C.P. 29-116	13.79	10.52	76.29	10.77	2.14	23.05	10.77	12.28
First Stubble—Yazoo Soil								
C.P. 29-103	16.78	13.28	79.14	23.89	2.87	68.56	23.89	44.67
C.P. 29-120	16.33	13.55	82.98	22.31	2.90	65.59	22.31	43.28
C.P. 33-243	15.65	13.42	85.75	19.29	2.90	55.94	19.29	36.65
C.P. 29-137	15.81	12.44	78.68	21.04	2.66	55.97	21.04	34.93
C.P. 31-529	15.55	12.03	77.36	20.04	2.66	53.31	20.04	33.27
C.P. 29-320	15.75	13.17	83.62	17.87	2.84	50.75	17.87	32.88
C.P. 28-19	16.39	13.51	82.88	16.85	2.93	49.37	16.85	32.52
First Stubble—Sharkey Soil								
C.P. 28-11	16.59	13.26	79.93	9.70	2.86	27.74	9.70	18.04
C.P. 29-116	16.30	12.69	77.85	9.65	2.71	26.15	9.65	16.50
C.P. 29-103	17.17	14.02	81.65	6.21	3.06	19.00	6.21	12.79
C.P. 31-509	15.13	12.50	82.62	6.06	2.66	16.12	6.06	10.06
C.P. 29-320	15.71	13.15	83.70	5.35	2.83	15.14	5.35	9.79
Second Stubble—Yazoo Soil								
C.P. 29-116	16.00	12.55	78.44	18.30	2.67	48.86	18.30	30.56
C.P. 29-137	16.49	13.31	80.72	15.28	2.88	44.01	15.28	28.73
C.P. 29-320	16.00	13.52	84.50	14.43	2.93	42.28	14.43	27.85
C.P. 28-19	16.49	13.90	84.29	10.60	3.03	32.12	10.60	21.52
Co. 281	15.82	13.46	85.08	6.25	2.92	18.25	6.25	12.00

NOTES

Fall Plant Cane: Both fields, Yazoo and Sharkey, were planted Sept. 18-19, 1939, and harvested and milled November 21, 1940. The cane was killed to the ground by the freezes of Nov. 15-16 (minimum temperatures, 22 and 25 degrees F.). Yazoo: topped normal way. Sharkey: topped down three joints.

First Stubble (Yazoo and Sharkey soils), harvesting dates: Nov. 20, 1939 and Nov. 4-5, 1940. Both fields planted Sept. 19-20, 1938.

Second Stubble, harvesting dates: Nov. 22, 1938, Oct. 31, 1939 and Nov. 4-5, 1940. Planted Sept. 24. 1937.

The Stubble fields were shaved twice, light and deep shaving, after the January freezes.

TABLE No. 2—GLENWOOD TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Per Ton	Value Per Acre	Less $1 Harvest	Balance
Fall Plant Cane—Yazoo Soil								
C.P. 29-103	16.51	13.09	79.29	21.83	$2.82	$61.56	$21.83	$39.73
C.P. 33-372	15.57	11.54	74.12	23.11	2.66	61.47	23.11	38.36
C.P. 29-120	15.29	12.08	79.01	21.95	2.66	58.39	21.95	36.44
C.P. 28-19	15.41	12.61	81.83	21.35	2.69	57.43	21.35	36.08
C.P. 34-79	16.59	13.91	83.85	17.30	3.04	52.59	17.30	35.29
C.P. 31-529	15.53	11.97	77.08	18.83	2.66	50.09	18.83	31.26
Co. 270	14.19	10.67	75.19	22.38	2.22	49.68	22.38	27.30
C.P. 33 243	15.07	12.30	81.62	16.00	2.66	42.56	16.00	26.56
C.P. 29-320	13.46	10.67	79.27	21.65	2.22	48.06	21.65	26.41
Fall Plant Cane—Sharkey								
C.P. 33-224	15.29	12.20	79.79	19.45	2.66	51.74	19.45	32.29
C.P. 29-120	14.57	11.65	79.96	13.72	2.66	36.50	13.72	22.78
C.P. 33-243	14.87	12.12	81.51	13.40	2.66	35.64	13.40	22.24
C.P. 28-11	15.77	12.56	79.64	11.38	2.68	30.50	11.38	19.12
C.P. 29-103	No test			16.55				
First Stubble—Yazoo Soil								
C.P. 28-19	16.64	13.34	80.17	17.58	2.88	50.63	17.58	33.05
C.P. 29-103	17.19	12.53	72.89	17.42	2.67	46.51	17.42	29.09
C.P. 29-120	16.68	12.24	73.38	15.93	2.66	42.37	15.93	26.44
C.P. 33-243	15.34	12.21	79.60	13.62	2.66	36.23	13.62	22.61
C.P. 29-137	15.96	11.94	74.81	13.00	2.66	34.58	13.00	21.58
C.P. 31-529	15.63	11.50	73.58	12.08	2.66	32.13	12.08	20.05
C.P. 29-320	15.57	11.91	76.49	6.23	2.66	16.57	6.23	10.34
Second Stubble—Yazoo Soil								
C.P. 29-116	15.73	11.85	75.33	14.85	2.66	39.50	14.85	24.65
C.P. 29-137	15.69	11.77	75.02	9.51	2.66	25.30	9.51	15.79
C.P. 28-19	16.15	13.09	81.05	8.56	2.82	24.14	8.56	15.58
C.P. 29-320	14.68	11.31	77.04	9.00	2.56	23.04	9.00	14.04
Co. 281	14.39	10.88	75.61	4.59	2.33	10.69	4.59	6.10
Second Stubble—(Mixed Land)								
C.P. 29-116	15.56	11.42	73.39	14.61	2.62	38.28	14.61	23.67
C.P. 29-137	16.31	12.50	76.64	10.58	2.66	28.14	10.58	17.56
C.P. 31-509	14.42	10.58	73.37	14.68	2.17	31.86	14.68	17.18
C.P. 28-11	15.66	11.51	73.50	7.50	2.66	19.95	7.50	12.45
Co. 190	14.98	11.34	75.70	7.83	2.57	20.12	7.83	12.29
C.P. 29-320	15.40	11.72	76.10	4.71	2.66	12.53	4.71	7.82
C.P. 28-19	16.05	12.61	78.57	4.50	2.69	12.11	4.50	7.61

NOTES

Fall Plant cane, (Yazoo & Sharkey): Planted Sept. 21, 1939 and harvested and milled Nov. 24-26, 1940. Cane killed to the ground by freezes of November 15-16 with minimum temperatures of 22 and 24 degrees F. The varieties were topped down two joints on the Yazoo soil and three joints on Sharkey soil. C.P. 28-11 and C.P. 31-529 were damaged 20 to 25% in broken tops from the August storm.

First Stubble: Harvesting dates, Nov. 21, 1939 and October 28-29, 1940. Planted Sept. 22, 1938. The stand of C.P. 29-320 was very poor.

Second Stubble: Harvesting dates, Nov. 23, 1938, Oct. 27, 1939 and Nov. 4-5, 1940. Both fields were planted Sept. 24, 1937.

The stubble test fields, first and second, were shaved lightly on the whole row before the severe January freezes.

TABLE No. 3—RESERVE TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Per Ton	Value Per Acre	Less $1 Harvest	Balance
Fall Plant Cane—Yazoo Soil								
C.P. 34-79	16.71	14.27	85.40	22.07	$3.13	$69.08	$22.07	$47.01
C.P. 33-243	15.30	12.52	81.83	23.04	2.67	61.52	23.04	38.48
Co. 270	15.98	13.11	82.04	18.91	2.82	53.33	18.91	34.42
C.P. 31-529	16.08	12.31	76.55	20.57	2.66	54.72	20.57	34.15
C.P. 29-320	14.76	11.64	78.86	20.32	2.66	54.05	20.32	33.73
C.P. 29-103	16.37	12.68	77.46	19.14	2.71	51.87	19.14	32.73
C.P. 33-372	14.57	11.44	78.52	19.89	2.63	52.31	19.89	32.42
C.P. 28-19	14.36	11.15	77.65	20.60	2.47	50.88	20.60	30.28
C.P. 29-120	15.40	12.30	79.87	17.72	2.66	47.14	17.72	29.42
First Stubble—Yazoo Soil								
C.P. 29-120	16.94	13.43	79.28	21.09	2.91	61.37	21.09	40.28
C.P. 29-137	16.05	11.79	73.46	22.57	2.66	60.04	22.57	37.47
C.P. 28-19	17.10	13.63	79.71	18.75	2.96	55.50	18.75	36.75
C.P. 31-529	16.98	12.92	76.09	20.34	2.77	56.34	20.34	36.00
C.P. 33-243	16.06	12.93	80.51	17.75	2.77	49.17	17.75	31.42
C.P. 29-103	17.05	12.46	73.08	18.25	2.66	48.55	18.25	30.30
C.P. 28-11	17.96	14.23	79.23	13.92	3.12	43.43	13.92	29.51
C.P. 29-320	16.74	13.21	78.91	15.42	2.85	43.95	15.42	28.53
Second Stubble—Yazoo Soil								
C.P. 29-116	16.01	11.90	74.33	24.76	2.66	65.86	24.76	41.10
C.P. 29-137	16.98	13.13	77.33	17.27	2.83	48.87	17.27	31.60
Co. 281	16.61	13.65	82.18	11.38	2.97	33.80	11.38	22.42
C.P. 28-19	18.08	14.52	80.31	10.19	3.20	32.61	10.19	22.42
C.P. 29-320	16.74	13.29	79.39	9.32	2.87	26.75	9.32	17.43

NOTES

Fall Plant Cane: Planted Sept. 20, 1939 and harvested and milled Nov. 26-27, 1940. Cane killed to the ground by freezes of Nov. 15-16, with minimum

temperatures of 27 and 28 degrees F. All varieties were topped in the normal way.

First Stubble: Harvesting dates, Nov. 29, 1939 and Nov. 6-7, 1940. Planted Sept. 21, 1938.

Second Stubble: Harvesting dates, Dec. 7, 1938. Oct. 24-25, 1939 and Nov. 6-7, 1940. Planted Sept. 28, 1937.

First and second stubble fields were shaved lightly, after the severe January freezes.

C.P. 28-11, C.P. 31-529 and C.P. 29-320 were damaged about 15 to 20 per cent in broken tops from the August storm.

TABLE No. 4—MEEKER TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Ton	Value Acre	Less $1 Harvest	Balance
Fall Plant Cane—Yahola very fine sandy loam								
C.P. 34-79	14.92	11.86	79.49	34.37	$2.66	$91.42	$34.37	$57.05
C.P. 28-19	16.28	13.22	81.20	26.39	2.85	75.21	26.39	48.82
C.P. 29-320	14.92	11.64	78.02	28.26	2.66	75.17	28.26	46.91
C.P. 33-243	14.62	11.24	76.88	29.72	2.52	74.89	29.72	45.17
C.P. 29-120	14.62	11.01	75.31	29.39	2.40	70.54	29.39	41.15
C.P. 31-529	15.31	11.69	76.36	24.00	2.66	63.84	24.00	39.84
C.P. 33-372	15.02	11.15	74.23	26.50	2.47	65.46	26.50	38.96
C.P. 29-103	15.11	10.16	67.24	31.88	1.95	62.17	31.88	30.29
Co. 270	13.75	10.17	73.96	27.04	1.95	52.73	27.04	25.69
First Stubble—Yahola very fine sandy loam								
C.P. 33-310	16.01	12.13	75.77	34.50	2.66	91.77	34.50	57.27
C.P. 32-134	14.72	11.65	79.14	30.75	2.66	81.80	30.75	51.05
C.P. 33-243	14.43	11.65	77.75	31.58	2.51	79.27	31.58	47.69
C.P. 28-19	16.19	13.21	81.59	19.95	2.85	56.86	19.95	36.91
C.P. 29-320	15.60	12.10	77.56	21.08	2.66	56.07	21.08	34.99
C.P. 31-529	14.33	10.08	70.34	27.97	1.90	53.14	27.97	25.17
C.P. 29-120	14.33	11.06	77.18	15.75	2.43	38.27	15.75	22.52
C.P. 29-103	15.69	11.86	75.59	13.44	2.66	35.75	13.44	22.31
Co. 281	14.24	11.14	78.23	14.39	2.47	35.54	14.39	21.15

NOTES

Fall Plant Cane: Planted October 4, 1939, harvested and milled Nov. 18-19, 1940. Cane killed to the ground by freezes of Nov. 15-16, with minimum temperatures of 27 and 29 degrees F. The cane was topped in the normal way. There was no damage from winds during the growing season.

First Stubble: Harvesting dates, Nov. 15-16, 1939 and Nov. 18-19, 1940. Cane killed to the ground by freezes of Nov. 15-16, with minimum temperatures of 27 and 29 degrees F. Planted October 4, 1938. The stubble was off-barred and shaved deep and dug several times with stubble-digger and hoes in early March.

TABLE No. 5—SHIRLEY TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Ton	Value Acre	Less $1 Harvest	Balance
Fall Plant Cane—Yahola very fine sandy loam								
C.P. 34-79	16.28	13.41	82.37	25.45	$2.90	$73.81	$25.45	$48.36
C.P. 34-79*	15.89	13.56	85.34	22.73	2.94	66.83	22.73	44.10
C.P. 34-79**	15.50	12.89	83.16	21.36	2.76	58.95	21.36	37.59
C.P. 28-19	17.75	14.94	84.17	21.37	3.31	70.73	21.37	49.36
C.P. 28-19*	16.58	14.26	86.01	19.32	3.13	60.47	19.32	41.15
C.P. 29-103	17.26	13.22	76.59	21.82	2.85	62.19	21.82	40.37
C.P. 29-103*	16.58	13.06	78.77	22.05	2.81	61.96	22.05	39.91
C.P. 29-320	15.80	12.54	79.37	20.00	2.67	53.40	20.00	33.40
C.P. 29-320*	14.72	11.93	81.05	21.14	2.66	56.23	21.14	35.09
C.P. 31-529	15.89	12.21	76.84	20.45	2.66	54.40	20.45	33.95
C.P. 31-529*	15.50	11.93	76.97	19.09	2.66	50.78	19.09	31.69
C.P. 33-243	15.99	13.41	83.86	17.27	2.90	50.08	17.27	32.81
C.P. 33-243*	15.21	12.90	84.81	18.18	2.77	50.36	18.18	32.18
Co. 270	15.70	12.56	80.00	19.09	2.68	51.16	19.09	32.07
Co. 270*	14.24	11.35	79.71	16.82	2.58	43.40	16.82	26.58
C.P. 29-120	15.70	12.74	81.15	16.37	2.72	44.53	16.37	28.16
C.P. 29-120*	15.31	12.67	82.76	15.45	2.71	41.87	15.45	26.42
C.P. 29-120**	15.50	12.43	80.19	11.83	2.66	31.47	11.83	19.64
First Stubble—Yahola very fine sandy loam								
C.P. 33-243	16.58	13.66	82.39	20.00	2.97	59.40	20.00	39.40
C.P. 29-103	16.87	12.90	76.47	22.09	2.77	61.19	22.09	39.10
Co. 281	16.58	13.80	83.23	18.18	3.01	54.72	18.18	36.54
C.P. 28-19	16.87	13.58	80.50	16.36	2.95	48.26	16.36	31.90
C.P. 29-320	15.99	12.09	75.61	17.27	2.66	45.94	17.27	28.67
C.P. 29-120	16.58	13.59	81.97	12.73	2.95	37.55	12.73	24.82
C.P. 29-137	16.67	13.11	78.64	11.36	2.82	32.04	11.36	20.68
C.P. 31-529	15.99	11.85	74.11	12.27	2.66	32.64	12.27	20.37
Second Stubble—Yahola very fine sandy loam								
C.P. 29-103	16.67	11.81	70.85	32.72	2.66	87.04	32.72	54.32
C.P. 28-19	17.94	14.70	81.94	21.82	3.25	70.92	21.82	49.06
C.P. 29-137	16.28	11.88	72.97	29.10	2.66	77.41	29.10	48.31
C.P. 29-320	15.99	12.22	76.42	28.18	2.66	74.96	28.18	46.78
Co. 281	16.48	13.07	79.31	21.82	2.81	61.31	21.82	39.49

NOTES

Fall Plant Cane: Planted Oct. 3, 1939. Harvesting and milling dates, Nov. 20- and 29, 1940. Cane killed by freezes of Nov. 15-16; minimum temperatures, 27 and 29 degrees F. (*) equals standing cane. (**) equals cane windrowed Nov. 19.

First Stubble: Harvesting dates, Dec. 7, 1939 and Oct. 29-30, 1940. Planted Oct. 3, 1938.

Second Stubble: Harvesting dates, Nov. 17, 1938, Dec. 7, 1939 and Oct. 29-30, 1940. Planted Oct. 11, 1937.

First and second stubble off-barred, shaved deep and thoroughly dug with stubble-diggers and hoes in the latter part of February and early March.

TABLE No. 6—STERLING TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Ton	Value Acre	Less $1 Harvest	Balance
Fall Plant Cane—Pharr silt loam								
C.P. 34-79	17.90	14.93	83.41	27.70	$3.31	$91.69	$27.20	$63.99
Co. 290	15.15	11.43	75.45	34.95	2.62	91.57	34.95	56.62
C.P. 29-320	17.94	15.09	84.11	22.45	3.35	75.21	22.45	52.76
C.P. 29-116	15.55	11.17	71.83	32.75	2.48	81.22	32.75	48.47
C.P. 33-243	16.12	12.52	77.67	28.94	2.67	77.27	28.94	48.33
C.P. 29-103	17.84	13.15	73.71	25.28	2.83	71.54	25.28	46.26
C.P. 31-529	17.47	13.40	76.70	24.21	2.90	70.21	24.21	46.00
C.P. 28-19	18.07	15.00	83.01	19.00	3.33	63.27	19.00	44.27
C.P. 29-120	17.32	14.08	81.29	19.91	3.08	61.32	19.91	41.41
Co. 270	16.80	13.18	78.45	22.45	2.85	63.76	22.45	41.31
First Stubble—Pharr silt loam								
C.P. 33-243	17.53	15.20	86.71	18.72	3.38	63.27	18.72	44.55
C.P. 29-103	18.58	14.86	79.98	19.44	3.29	63.96	19.44	44.52
C.P. 29-116	16.65	13.28	79.76	23.05	2.87	66.15	23.05	43.10
Co. 290	16.33	12.98	74.49	22.69	2.79	63.31	22.69	40.62
C.P. 33-224	16.70	12.68	75.93	23.01	2.71	62.36	23.01	39.35
C.P. 29-120	17.93	14.45	80.59	16.44	3.18	52.28	16.44	35.84
C.P. 31-529	17.13	13.35	77.93	17.52	2.89	50.63	17.52	33.11
C.P. 29-137	16.94	13.50	79.69	16.32	2.93	47.82	16.32	31.50
C.P. 28-19	17.81	16.38	91.97	10.88	3.69	40.15	10.88	29.27
C.P. 29-283	16.57	12.35	74.53	17.59	2.66	46.79	17.59	29.20
C.P. 29.320	17.34	14.37	82.87	12.07	3.16	38.14	12.07	26.07
Second Stubble—Pharr silt loam								
Co. 290	16.40	13.65	83.23	12.39	2.97	36.80	12.39	24.41
C.P. 29-116	17.20	13.54	78.72	11.15	2.94	32.78	11.15	21.63
C.P. 31-509	16.44	13.39	81.45	8.72	2.90	25.29	8.72	16.57
C.P. 29-320	17.40	14.81	85.11	6.19	3.27	20.24	6.19	14.05
C.P. 29-137	17.40	14.50	83.33	5.50	3.19	17.55	5.50	12.05
C.P. 28-19	18.47	16.23	87.87	3.21	3.65	11.72	3.21	8.51
Co. 281	17.89	15.13	84.57	2.29	3.36	7.69	2.29	5.40

NOTES

Fall Plant Cane: Planted Sept. 25, 1939. Harvested and milled Nov. 14, 1940. C.P. 31-529 was badly broken by the August storm; showing about 30% broken tops. C.P. 29-320 was also damaged by this storm showing about 20% broken tops.

First Stubble: Harvesting dates Dec. 14. 1939 and Nov. 13-14, 1940. Planted October 6, 1938. C.P. 31-529 and C.P. 29-320 showed about the same amount of storm damage as in the plant cane varieties.

Second stubble: Harvesting dates Dec. 2, 1938, Nov. 13, 1939 and Nov. 13-14, 1940. Planted Sept. 21, 1937.

TABLE No. 7—BILLEAUD TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Ton	Value Acre	Less $1 Harvest	Balance
Fall Plant Cane—Lintonia silt loam								
C.P. 33-243	17.26	14.97	86.73	16.14	$3.32	$53.58	$16.14	$37.44
C.P. 33-224	17.26	14.76	85.52	15.42	3.26	50.27	15.42	34.85
C.P. 34-79	20.09	17.75	88.35	11.15	4.06	45.27	11.15	34.12
C.P. 29-116	15.80	12.29	77.88	18.30	2.66	48.69	18.30	30.38
C.P. 29-120	17.75	15.51	87.38	12.25	3.46	42.39	12.25	30.14
Co. 290	15.99	12.71	79.49	17.45	2.72	47.46	17.45	30.01
C.P. 33-310	17.36	13.30	76.61	15.15	2.87	43.48	15.15	28.33
C.P. 31-509	16.28	13.77	84.58	14.03	3.00	42.09	14.03	28.06
C.P. 29-320	16.67	14.21	85.24	12.53	3.11	38.97	12.53	26.44
C.P. 31-529	16.87	13.51	80.08	13.67	2.93	40.05	13.67	26.38
Co. 270	16.19	13.37	82.58	12.00	2.89	34.68	12.00	22.68
First Stubble—Lintonia silt loam								
Co. 290	17.30	13.92	80.46	22.84	3.04	69.43	22.84	46.59
C.P. 33-243	18.34	15.66	85.39	18.27	3.50	63.95	18.27	45.68
C.P. 31-509	18.10	15.50	85.64	17.60	3.46	60.90	17.60	43.30
C.P. 29-116	17.20	13.03	75.76	22.77	2.80	63.76	22.77	40.99
C.P. 29-283	18.00	14.19	78.83	19.35	3.11	60.18	19.35	40.83
C.P. 29-120	18.10	15.26	84.31	15.97	3.39	54.14	15.97	38.17
C.P. 29-103	20.46	16.57	80.99	13.43	3.74	50.23	13.43	36.80
C.P. 29-320	18.30	15.64	85.46	13.43	3.50	47.01	13.43	33.58
C.P. 31-529	18.50	14.95	80.81	13.14	3.31	43.49	13.14	30.35
C.P. 29-137	18.20	15.01	82.47	11.09	3.33	36.93	11.09	25.84

NOTES

Fall Plant Cane: Planted Sept. 26, 1939. Har-

vested and milled Nov. 22-23, 1940. Cane killed by freezes of Nov. 15-16, with minimum temperatures of 24 and 25 degrees F. Normal topping of all varieties.

First Stubble: Harvesting dates Dec. 9, 1939 and Nov. 8-9, 1940. Planted Sept. 26, 1938. The stubble was shaved deep and dug thoroughly with stubble-digger and hoes after the severe January freezes.

August storm: C.P. 31-529 and C.P. 29-320 were damaged to a considerable extent, showing about 30% and 16% broken tops respectively. All of the other varieties showed comparatively light damages mostly in the way of twisted tops and crooked stalks. The rows were badly washed and the land was left in a very packed condition.

TABLE No. 8—YOUNGSVILLE TEST FIELDS

Variety	Normal Juice Brix	Normal Juice Sucrose	Normal Juice Purity	Tons Per Acre	Value Per Ton	Value Per Acre	Less $1 Harvest	Less $1 Balance
Fall Plant Cane—Olivier silt loam								
C.P. 29-116	16.01	12.22	76.33	16.72	$2.66	$44.48	$16.72	$27.76
C.P. 34-79	18.72	16.42	87.71	9.50	3.70	35.15	9.50	25.65
C.P. 33-243	16.68	14.33	85.91	11.55	3.15	36.38	11.55	24.83
C.P. 29-320	16.88	14.13	83.71	10.50	3.09	32.45	10.50	21.95
Co. 290	16.20	12.98	80.12	10.93	2.79	30.49	10.93	19.56
Co. 270	16.20	13.20	81.48	9.98	2.85	28.44	9.98	18.46
C.P. 29-120	16.68	13.04	78.18	10.02	2.80	28.06	10.02	18.04
C.P. 31-529	17.36	13.85	79.78	8.93	3.02	26.97	8.93	18.04
C.P. 33-224	16.39	13.42	81.88	7.90	2.90	22.91	7.90	15.01
C.P. 28-11	16.49	13.47	81.69	6.45	2.92	18.83	6.45	12.38
First Stubble—Olivier silt loam								
C.P. 29-120	18.33	16.05	87.56	8.55	3.60	30.78	8.55	22.23
C.P. 29-103	19.11	15.98	83.60	7.92	3.59	28.43	7.92	20.51
C.P. 33-243	18.24	15.50	84.98	7.22	3.46	24.98	7.22	17.76
C.P. 29-283	17.75	14.54	81.92	7.67	3.20	24.54	7.67	16.87
C.P. 29-116	17.46	13.00	74.46	9.40	2.79	26.23	9.40	16.83
Co. 290	16.98	14.30	84.22	6.76	3.14	21.23	6.76	14.47
C.P. 29-137	17.75	14.64	82.48	5.95	3.23	19.22	5.95	13.27
C.P. 28-11	17.07	13.95	81.72	6.22	3.05	18.97	6.22	12.75
C.P. 31-509	17.46	14.46	82.82	5.15	3.18	16.38	5.15	11.23
C.P. 28-19	17.85	14.85	83.19	4.30	3.29	14.15	4.30	9.85
C.P. 29-320	17.46	14.46	82.82	4.52	3.18	14.37	4.52	9.85
C.P. 31-529	16.78	13.63	81.23	5.00	2.96	14.80	5.00	9.80

NOTES

Fall Plant Cane: Planted Sept. 28, 1939. Harvested and milled Nov. 15-17, 1940. Cane killed by freezes of Nov. 15-16; minimum temperatures 24 and 25 degrees F.

First Stubble: Harvesting dates, Nov. 24-26, 1939 and Nov. 15-17, 1940. Planted Sept. 30, 1938. The stubble was shaved after the January freezes.

August storm: C.P. 31-529, C.P. 28-11 and C.P. 29-320 showed the greatest amount of broken tops, with approximately 25%, 20% and 15% respectively for these three varieties. The other varieties showed comparatively light damage with mostly twisted tops and crooked stalks. The rows were badly washed and the land was left in a very packed condition.

TABLE A. RAINFALL DISTRIBUTION AT THE TEST FIELDS SEASON OF 1940

(Expressed in inches)

Location	Jan. Days	Jan. In.	Feb. Days	Feb. In.	March Days	March In.	April Days	April In.
Cinclare	8	2.40	11	6.25	4	3.20	8	10.15
Napoleonville	5	3.48	8	11.34	5	7.17	7	7.25
Reserve	8	3.39	12	11.87	8	5.14	10	7.79
Franklin	9	2.93	11	7.53	6	5.35	6	6.18
Cheneyville	10	3.54	10	5.91	4	3.55	7	8.76
Meeker	3	1.40	7	4.65	4	2.95	8	8.72
Broussard	3	2.81	6	6.29	3	2.04	6	9.73

Location	May Days	May In.	June Days	June In.	July Days	July In.	August Days	August In.
Cinclare	2	.35	16	7.35	13	9.75	10	11.70
Napoleonville	2	.40	12	8.92	14	7.47	9	12.28
Reserve	4	.69	18	12.41	15	5.28	12	13.56
Franklin	3	.63	17	12.94	19	7.74	18	19.09
Cheneyville	4	1.17	11	11.19	17	9.18	12	8.81
Meeker	4	1.12	10	12.48	15	6.42	9	8.66
Broussard	4	.39	17	16.53	14	7.50	6	28.92

Location	Sept. Days	Sept. In.	Oct. Days	Oct. In.	Nov. Days	Nov. In.	Dec. Days	Dec. In.	Total Days	Total In.
Cinclare	9	3.60	1	.05	9	11.85	11	11.20	102	77.85
Napoleonville	6	6.16	1	.09	7	3.53	7	12.32	83	80.41
Reserve	9	3.34	2	.54	7	3.33	18	13.92	123	81.26
Franklin	9	3.05	2	.23	6	3.05	12	12.44	118	81.16
Cheneyville	1	7.10	3	3.60	9	8.49	9	13.42	97	84.72
Meeker	2	5.68	3	3.62	7	8.65	12	9.14	84	73.49
Broussard	4	1.60	1	1.38	9	10.62	6	7.41	78	95.22

NOTE

Rainfall data of Cinclare, Reserve, Franklin and Cheneyville taken from U.S.D.A. Weather Bureau records. Napoleonville, Meeker and Broussard were taken from records of test field cooperators.

TABLE B. MINIMUM TEMPERATURES AT THE TEST FIELDS

(January, February, April and November, 1940)
(Expressed in degrees Fahrenheit)

Date	Cinclare	Napoleonville	Reserve	Cheneyville	Franklin			Broussard
1/15	28	28	32	27	30			24
1/16	23	25	30	22	28			25
1/17	25	25	28	26	28			11
1/18	26	35	29	24	36			11
1/19	13	16	19	12	16			18
1/20	14	16	19	14	20			26
1/21	17	17	20	19	21			21
1/22	27	27	25	26	29			21
1/23	24	16	27	23	26	35*		22
1/24	19	23	24	14	33	37*		23
1/25	22	25	25	22	25	37*		15
1/26	18	20	21	11	22	36*		22
1/27	14	15	18	10	18	38*		24
1/28	20	19	23	21	212	.....	35**	24
1/29	23	23	23	23	25	36*		29
1/30	30	23	26	29	35	38*		25
1/31	32	33	28	24	26	.....	36**	29
2/1	26	27	30	26	35			33
2/2	28	33	32	30	36			37
4/13	32	32	36	31	34			31
11/14	30	32	34	28	35			30
11/15	22	22	27	22	26			24
11/16	25	22	28	24	27			25

NOTES

The minimum temperature data of Cinclare, Reserve, Franklin and Cheneyville were taken from the records of U.S.D.A. Weather Bureau. Napoleonville data furnished through courtesy of Elm Hall Plantation of Godchaux Sugars, Inc., and the Broussard data was furnished by the Billeaud Factory.

Soil temperatures (*) at four inch depth, and (**) at three inch depth, for the period of January 23-31, at Franklin, were taken by E. J. Badeaux, Field Supt., Sterling Sugars, Inc.

SUMMARY

The season of 1940 in the sugar cane belt of Louisiana was one of the most adverse in the history of the industry during the entire four seasons of the year. The severe January freezes with eighteen consecutive days of freezing and below freezing temperatures, according to the U.S.D.A. Weather Bureau, were more severe than the February freezes of 1895 and 1899, with cold periods of eleven and seven days respectively. This, together with the late cold and wet spring, excessive rains during the cultivating season, spring and fall droughts, and the middle of November killing freezes, were all contributing factors or causes for the short cane crop that was produced in the state. The severe August tropical hurricane accompanied by torrential rains was very injurious, occasioning heavy losses in crops, livestock, property, etc., in the parishes of Lafayette, Vermilion and Acadia. The test field results and the summary of the work presented in this report are based entirely on the performance of the varieties during the extremely adverse season of 1940.

Cinclare-Glenwood-Reserve:—On Yazoo soil of the three alluvial section test fields, averages of the plant cane and first stubble "balance column" figures and sucrose tests indicate that C.P. 29-103 was the leading variety. The six varieties ranked in the following order: C.P. 29-103, 12.67%; C.P. 28-19, 12.63%; C.P. 29-120, 12.54%; C.P. 33-243, 12.52%; C.P. 31-529, 11.96% and C.P. 29-320, 11.92%.

In the unreleased varieties, C.P. 34-79 and C.P. 33-243 made a very fine showing at Glenwood and Reserve; ranking first and second respectively as plant cane at both test fields. C.P. 33-243 made a better showing than C.P. 29-320 as first stubble at

the three test fields. These two varieties have been classed as extremely susceptible to red rot by the plant pathologists of the Houma and University Experiment Stations. C.P. 34-79 at Reserve showed quite an infestation of chlorotic streak in the plant cane and first stubble plots, which seemed particularly injurious to the variety.

C.P. 33-372, another unreleased variety made a good showing at Glenwood in ranking second in the plant cane tests. It is a very vigorous growing cane, with good stubbling qualities and was planted for further testing at the test fields.

The averages of "balance column" and sucrose tests of the three second stubble fields on Yazoo soil showed that the varieties ranked as follows: C.P. 29-116, $32.07 and 12.10% sucrose; C.P. 29-137, $25.37 and 12.74% sucrose; C.P. 28-19 $19.84 and 13.84% sucrose; C.P. 29-320, $19.77 and 12.71% sucrose and Co. 281, $13.51 and 12.66% sucrose.

In the Sharkey soil tests on Cinclare, C.P. 33-243, C.P. 29-103 and C.P. 33-224 made the best showing. In the first stubble results, C.P. 28-11, C.P. 29-116 and C.P. 29-103 were the leading varieties.

At Glenwood, C.P. 29-116 was the leading variety on "mixed land" second stubble, and C.P. 33-224 and C.P. 29-103 made the best showing on Sharkey soil as plant cane.

Meeker-Shirley:—At Meeker, C.P. 28-19 and C.P. 29-320, the two standard field canes, showed good performance as plant cane, being outranked only by the unreleased variety C.P. 34-79. In the first stubble tests, the two standard canes were surpassed by the following three unreleased varieties: C.P. Nos. 33-310, 32-134 and 33-243.

On November 19, equal-sized plots of the Shirley eight plant cane varieties were harvested five days after the killing freeze. One plot each of C.P. 34-79 and C.P. 29-120 were windrowed, and the ten equal-sized plots of eight standing and two windrowed varieties were harvested and tested 15 days after the killing freeze of November 15. The results of these plant cane tests show that the four leading varieties of standing cane on the two dates harvested were as follows: C.P. 34-79, C.P. 28-19, C.P. 29-103 and C.P. 29-320. C.P. 29-120 and C.P. 29-103 standing cane, ranked first in less deterioration in the 15 day period; while C.P. 34-79 and C.P. 29-120 showed losses of .34% and .52% sucrose as windrowed cane in 15 days time.

In the Shirley averages of first and second stubble results, four comparable varieties ranked as follows, with average sucrose for each: C.P. 29-103, 11.86%; C.P. 28-19, 14.14%; Co. 281, 13.44% and C.P. 29-320, 12.16%. C.P. 33-243 was the leading variety as first stubble followed by C.P. 29-103 and Co. 281. In the second stubble, C.P. 29-103 and C.P. 28-19 made the best showing.

The season of 1940 was particularly unfavorable for C.P. 29-320, which in previous seasons has ranked as the outstanding cane. At both Meeker and Shirley in all of the plant cane and stubble tests it has been surpassed by C.P. 28-19.

Sterling:—The results of averages of the Sterling test field plant cane and first stubble indicate that the varieties rank in the following order, with average sucrose of each variety: Co. 290, 12.21%; C.P. 33-243, 13.86%, C.P. 29-116, 12.23%; C.P. 29-103, 14.01%; C.P. 31-529, 13.38%; C.P. 29-320, 14.73%; C.P. 29-120, 14.27% and C.P. 28-19, 15.69%. C.P. 34-79 was the leading plant cane variety; while C.P. 33-243 and C.P. 29-103 outranked C.P. 29-116 and Co. 290 in the first stubble tests. Co. 290 and C.P. 29-116 made the best showing as second stubble.

Billeaud-Youngsville:—The averages of "balance column" and sucrose tests for plant cane and first stubble of the Billeaud test field show that the varieties rank as follows with the average sucrose given for each variety: C.P. 33-243, 15.32% Co. 290, 13.34%, C.P. 29-116, 12.66%; C.P. 31-509, 14.64%; C.P. 29-120, 15.38%; C.P. 29-320, 14.93% and C.P. 31-529, 14.23%.

C.P. Nos. 33-243, 33-224 and 34-79, three unreleased varieties, outranked C.P. 29-116, C.P. 29-120 and Co. 290 in the plant cane tests.

In the first stubble results, Co. 290 was the leading cane; while C.P. 33-243 ranked second, C.P. 31-509 third, and C.P. 29-116 fourth.

At Youngsville, the fall plant cane results indicate that C.P. 29-116 was the leading variety as plant cane; while C.P. Nos. 34-79, 33-243 and 29-320 surpassed Co. 290, fifth ranking variety.

In the first stubble results, C.P. Nos. 29-120, 29-103, 33-243, and 29-283 surpassed C.P. 29-116 and Co. 290, fifth and sixth ranking varieties.

The averages of plant cane and first stubble "balance column" and sucrose tests indicate that the varieties ranked as follows, with average sucrose given for each: C.P. 29-116, 12.61%; C.P. 33-243, 14.92%; C.P. 29-120, 14.55%; Co. 290, 13.64%; C.P. 29-320, 14.30%; C.P. 31-529, 13.74% and C.P. 28-11, 13.71%.

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Domestic Producers Encouraged by Senate

(By C. J. Bourg)

The Adams Bill to re-allot Philippine deficits passed the Senate by the highly satisfactory vote of 45 to 26. In addition to the 45 Senators voting "yea," there were 10 absentees who were paired in favor of the Bill, making a total recorded strength of 55 Senators who agreed that all deficits in the quota of the Philippine Islands should be transferred to domestic sugar-producing areas, excepting the first 75,000 tons which are to be allocated to foreign countries other than Cuba.

The full significance of the vote in the Senate reaches beyond the simple question of what areas may supply deficits. The debate in the Senate furnishes ample proof that the underlying question involved was whether United States consumers should be made to rely upon foreign areas, when there exist large supplies of domestic sugar and thousands of acres available for producing sugar in the United States.

The Congressional Records of May 29th, June 2nd and 3rd contain a wealth of information on the subject of sugar economics and legislation. The discussions were not confined to the amendment offered by Senator Adams of Colorado but include a comprehensive review of the sugar situation in America, from the standpoint of the consumer and of the producer.

Senator Allen J. Ellender of Louisiana took a leading part in the discussions and presented a compilation of facts and figures upon which he bases his objective of securing for the continental producers of the United States the right gradually to increase their production until they supply at least 40% of the consumption requirements of the consumers of sugar in the United States. The Senator made a major point of the fact that when the Jones-Costigan Act was passed in 1934, it provided for an estimated annual consumption in the United States of 6,452,000 tons. The Sugar Act of 1937 provides for a basic consumption of 6,682,670 tons. The present trend of consumption, which has been running nearly 1,000,000 tons above last year, justifies the expectation that consumption in the United States during 1941 will exceed 7,000,000 tons. A corrected consumption estimate of 7,125,561 tons was announced this week by the Secretary of Agriculture. The Senator argued that this increased consumption establishes the foundation for his contention that continental producers should be allowed to increase progressively from the present production allowance of 29% to an expansion up to 40%. He recited the current difficulties of transporting sugar from far-away islands to the United States, with due emphasis on the excessive cost of such transporation, even when ships can be found. He also appropriately cited the advantages of creating a reserve supply of domestic sugar to meet emergencies such as the United States is being confronted with in 1949.

Senator Ellender asserted that the sugarcane growers in Louisiana have not received parity, except in 1934; and, when the accuracy of this statement was questioned by Senator George as the spokesman for the Administration, Senator Ellender asked that the official figures be produced. On the next day, Senator George introduced into the Record a statement showing that for the first six years of the sugar program (1934-39) the average income per ton of sugarcane for Louisiana producers was $3,90, as compared to parity of $4.62. These parity figures, plus the fact that the average acres harvested in sugarcane for sugar were 242,000 acres as compared to 239,000 acres in 1934 when the program started, established the fundamental reasons why the Louisiana sugar industry insists that it is entitled to a greater and better basis of participation in the sugar program.

The Coffee Bill, which has been favorably reported by the House Committee on Agriculture, has the same purpose as the Adams Bill; but the approach is slightly different. The Adams Bill sets as a maximum 75,000 tons of any Philippine deficit which can be allotted to foreign countries other than Cuba. The Coffee Bill provides that any deficit in the dutiable sugars of the Philippine quota shall be alloted to foreign countries, but all deficits in the duty-free quota of the Philippine Islands shall be allotted to domestic areas. Thus, the Coffee Bill carries out to the letter the requests made in 1937 by the Secretary of State and the Secretary of Agriculture when they proposed that section of the law.

On April 8, 1937, the Secretary of Agriculture wrote:

"An additional measure for increased diversification of the foreign market for exports is contained in the proposed provisions under which any deficit of full-duty sugars, including a Philippine deficit of such sugars, would be allotted among the countries supplying such sugar in proportion to their present quotas * * *."

On April 30, 1937, the Secretary of State said:

"In order to increase the full-duty without disturbing the basis of the existing quota allocations, the draft of a bill presented by the Secretary of Agriculture proposed that any part of the full-duty share of its quota not utilized by the Commonwealth of the Philippine Islands be reallocated on a pro rata basis to the full-duty countries. Under the Jones-Costigan Act, the Philippines have not elected to use any part of the full-duty portion of its quota, so that it would seem reasonable to assume that usually this part of its quota would be available for reallocation."

In reporting the Coffee Bill to the House, the Committee on Agriculture directs attention that there was no suggestion by either Secretary that anything more than the dutiable portion of the Philippine quota should be allocated to foreign countries. The Committee further makes the point that by contending otherwise at this time, these Secretaries are insisting for all practical purposes that domestically produced sugar be withheld from the market and its production reduced while foreign countries are unloading their supplies in our home markets.

For many years the American Sugar Cane League has warned about the experience of the 1917-20 period during and following the World War. Our plea has been that America should become more self-sufficient in sugar. We are now entering a period of unlimited emergency with looming threats of war conditions, and, therefore, the decision of Congress on the Coffee-Adams Bill will be determined by the realities. The Maritime Commission admits that additional ships are needed for bringing strategic materials like rubber, tin, and zinc from the East Dutch Indies, which is the only available source of such materials in large quantities. The different agencies of the Federal Government have repeatedly stated

in the past several months that there are ample supplies of sugar in the western hemisphere. Consequently, defense officials, in collaboration with the 1829—Sugar Bul—FIFTEEN) Maritime Commission, must decide whether it is advisable to continue to use valuable shipping space for sugar to be transported 7,000 miles, when there are supplies of sugar available at home and near home. To be realistic about sugar, one is forced to admit that the only sugar which is "available" to American consumers is the sugar which can be delivered physically in the homes of the United States and at reasonable prices. Distressing as the emergency is, we know full well that the period of guessing will soon be over, and the American people will be able to decide for themselves whether the supplies of sugar are ample in quantity and reasonable in price.

The present provision in the law regarding the Philippine deficit does not take care of a situation where the deficit would be so great that foreign countries would be unable to fill it. The only way in which domestic sugars could replace the deficit under the Sugar Act would be to resort to the drastic measure of a suspension of quotas. An amendment is obviously needed to correct this omission, in the interest of smooth administration. If there is a deficit in any domestic area, the law provides for a distribution of that deficit among the normal sources of supply.

The main objection to the Coffee-Adams Bill from the Administration's standpoint has been that such a change might be misconstrued as a broken promise and as a violation of the Good Neighbor Policy. The letters of the Secretary of State and the Secretary of Agriculture above quoted are the best evidence that such a conclusion would be completely unjustified. The very fact that the normal basic quota of the foreign countries involved amounts to a total of 26,000 tons and the Bills would grant to them an additional 75,000 tons or more, which is at least three times greater than the normal imports from these foreign countries, destroys any argument about good faith in carrying out the Good Neighbor Policy. There was no disagreement in the Senate on the fundamentals of Pan American cooperation, but the domestic obligations of the United States Government can hardly be completely submerged in order to improve international relations. Above all, if economic sacrifices are to be made in the extension of the Good Neighbor Policy to sugar-producing countries of the Western Hemisphere, the burden must necessarily be distributed equitably among the citizens and industries of the Nation, not borne solely by agriculture, or by the sugar industry alone. As we see it, Senator Vandenberg of Michigan posed the final and determining question when, after stating that despite the charge that the Adams Bill breaks a promise its provisions give foreign producers three or four times what they ever had or ever expected, he asked: "How large a token must we give before we reach the maximum of good-neighborliness and can begin to think about ourselves?"

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Experimental Milling Results of the Audubon Sugar factory, L. S. U.

By T. Ben Arnold

Results for the Grinding Season of 1940

INTRODUCTION

The Audubon Sugar Factory submits herewith results of Milling Tests conducted during the 1940 Grinding Season. It is probably superfluous to recall to anyone connected with the Louisiana Sugar Industry that the 1940 season was extremely short. However, as this resulted in limiting the period in which tests could be conducted and then checked, we feel that this should be borne in mind when analyzing the various data incorporated in this report. It is the intention of the staff of Audubon Sugar Factory to report the mill tests in 1941 and if any additional or contrary data are secured to report these in another article next year.

Because of the loss of sugar remaining in cane bagasse is so readily visible (it is generally shown on each daily laboratory report) the problem of improved extraction through more efficient milling has invited the attention of sugar technologists for many years. There has been considerable investigations in this field and a considerable amount of literature has been amassed of a long period of time reporting on these investigations.

Due to many influencing factors, we have found the literature at variance in many instances. This variation in data can in some cases be attributed to lack of facilities in commercial factories to secure reliable data and to the prohibitive costs that would be incurred by a commercial factory if operations were interrupted and changes made in equipment in order to assure definite results.

We feel that the Audubon Sugar Factory offers the Sugar Cane Industry in general and the Louisiana Sugar Cane Industry in particular an unequalled facility for conducting milling experiments on other factory experiments. This because of the fact that the factory is equipped with modern equipment of commercial size and comparable results can be secured in any commercial mill. However as Audubon Sugar Factory is operated strictly for research purposes and not as a commercial factory the operations are regulated so that reliable data should be secured.

It is the purpose of this paper to present the data secured in 1940 from tests on the mill to determine the effects of the following variables on mill extraction—(1) Maceration, (2) Roll Pressure, and (3) Mill Roll Surface Speeds.

It should be borne in mind that this report shows only results and no evaluation of the economics of either of the three studies made is attempted at this time. As almost every mill differs in the Louisiana Sugar Factory Group, each one offers a separate problem as to just how far that factory could or should go towards improving extraction by any means. Some mills, of course, cannot operate at high roll speeds even if desired as cut steel gears are required when roll surface speeds are high. Evaporator capacity or fuel costs for excess evaporation have to be correlated with increased maceration to determine the economic limit in many cases. In some instances mill roll pressures are of necessity kept below the optimum due to structural weaknesses of the mill shafts, housings or gear train. It is intended to indicate the effects the studied factors have on extraction and application would follow according to each individual factory's economic evaluation of the data.

In addition to the three studies enumerated, a series of tests were made for the purpose of determining the actual pressure maintained on the turnplate during grinding operations. These data are not conclusive and must be considered as indicative only.

The tests were conducted under the direction of Dr. A. G. Keller, Asst. Prof. of Chemical Engineering, and until January 1941 Supt. of Audubon Sugar Factory, by Mr. T. Ben Arnold, Graduate Student in Chemical Engineering. Mr. J. J. Munson, Vice-President of the South Coast Company was very helpful in collaborating with Dr. Keller on planning the procedure that was followed to obtain the data contained in this report.

The Effect of Maceration on Extraction

The use of water as an extracting agent is one of the most effective means of increasing the yield of sucrose by milling. Figure 1 shows that extraction increases rapidly with maceration from 0 to about 30% and then gradually reaches a maximum of 94% with about 60% maceration under these conditions.

The maceration water was applied to the blanket as it emerged from the second mill. The thin juice from the third mill was pumped on to the blanket as it left the first mill. It may also be of some consequence to state that the cush-cush from all mills was returned to the intermediate carrier before the second mill. It was found that considerable slippage occurred when there was a large quantity of cush-cush entering the second mill. This may be explained by the fact that due to the fineness and extreme moisture content of the material, the coefficient of friction is greatly reduced between the bagasse and the rolls.

It might be possible to increase extraction with a given set of conditions by increasing the distance between the rolls. This would give the water a longer time to diffuse into the notes and inter-nodes of the cane which had not been broken down.

Table No. 1

Effect of Maceration on Extraction

Test No.	Tons Cane per Hour	Mac. % Cane	Extraction	Bagasse Moisture
38	19.50	53.25	93.91	44.6
33	18.82	37.05	93.6	45.5
37	24.72	32.5	93.3	44.7
30	21.96	29.25	93.0	44.72
40	14.0	29.13	92.84	43.8
34	20.04	16.01	91.02	45.5
31	24.85	0	87.6	41.8
32	24.73	0	87.7	44.9

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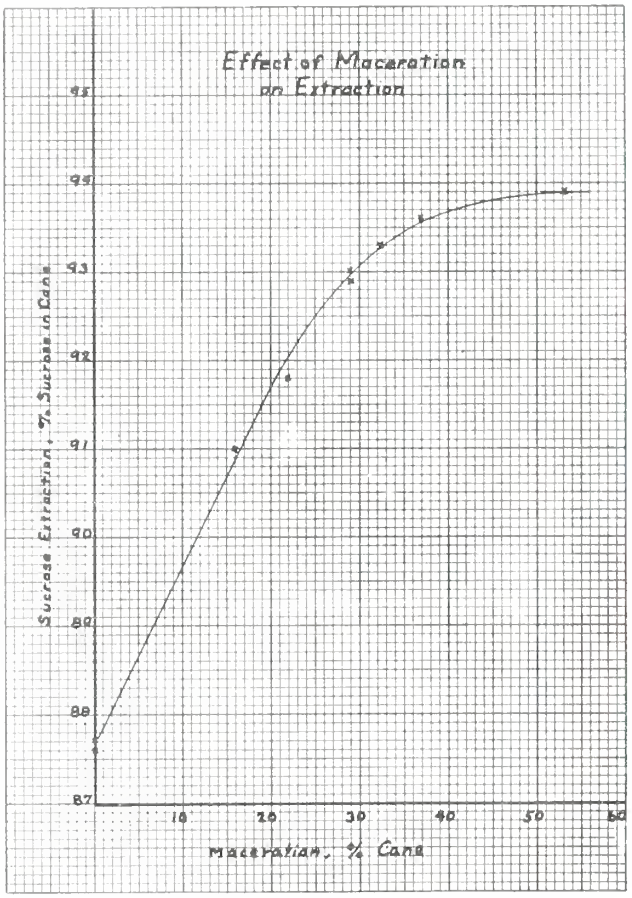
The above tests were carried out with the speed of the first mill being 32 feet per minute and a total pressure on all mills of 290 tons.

FIGURE 1



The Effect of Pressure on Extraction

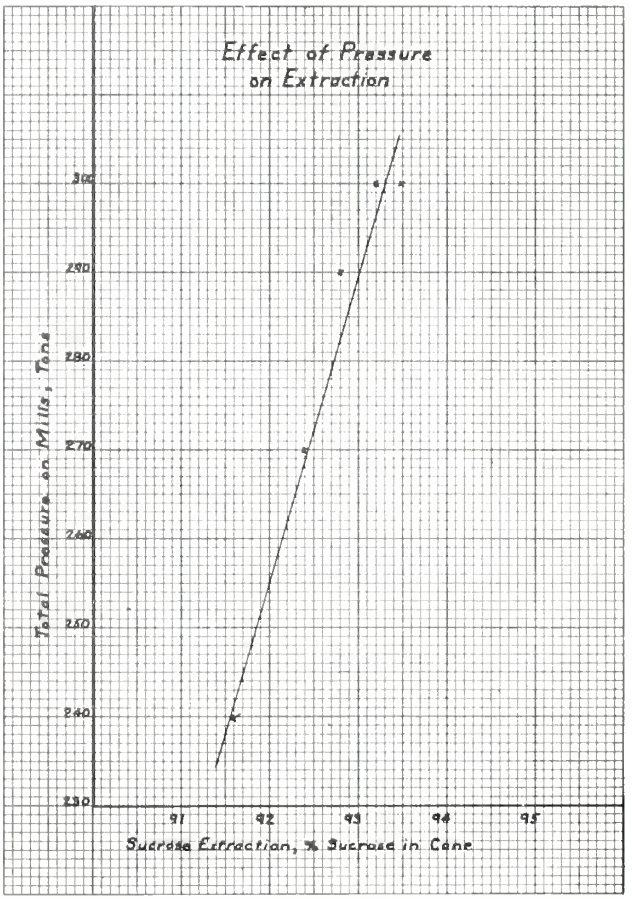
The effect of pressure on extraction can readily be seen from Figure 2. These few tests show that a plot of pressure versus extraction gives a straight line within the range studied. However, it is believed that the line will become hyperbolic if the pressure is raised. These higher pressures could not be reached because of possible damage to the rolls. Future tests will give the desired results.

Table No. 2

Test No.	Mac. % Cane	Tons Cane per Hour	Pressure on All Mills	Pressure on Last Mill	Extraction % Cane
41	25	15	240	90	91.58
45	30.37	18.1	270	100	92.4
40	29.13	14.0	290	115	92.8
43	28.8	16.96	300	110	93.2
44	26.75	17.3	300	110	93.48

These tests were carried out at a speed of 30 feet per minute.

FIGURE 2



The Effect of Mill Speed on Extraction

The effect that mill speed has on extraction is not clearly defined by Figure 3, although the trend is definitely shown. The substantiating data were taken from the results as a whole. Tests were not carried out for the sole purpose of determining the effect

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of speed on extraction; thus there is not enough data for one to make any final conclusions. It is believed by this reporter that extraction should decrease as the mill speed is increased, because of the decreased time for drainage of the juice from the rolls. Another reason is that the maceration water does not diffuse into the innermost parts of the fibers because of a shorter diffusion period between the mills.

Table No. 3

Test No.	Mac. % Cane	Total Mill Pressure	Mill Speed	Extraction
26	18.95	280	54.2	90.7
13	19.17	280	47.1	91.08
11	15.6	265	41.5	90.96
34	16.01	280	34	91.02
20	17.8	280	33	91.41
27	16.98	280	29.1	92.46
17	18.66	280	28.3	92.66

An Estimation of the Pressure on the Turnplate

Mr. J. J. Munson suggested, in a letter to Dr. A. G. Keller, that it would be of utmost importance to know the unit pressure on the turnplate while grinding.

In order that some estimate of the actual reaction pressure of the turnplate could be made, the following tests were undertaken.

Test No. 1

The mill was run continuously with a thick blanket of bagasse in order that the top roll might be floating. It was stopped instantly and the following data were taken:

(1) Pressure applied to top roll.

(2) Height of both ends of roll above their respective seats.

The pressure was then released and the second item of the above was again measured, thus giving the expansion of the bagasse with only the weight of the roll on it.

The lower rolls were then backed off and the pressure was applied until the top roll had reached its original position, this pressure was then recorded.

The results are as follows:

(1) Initial pressure on Top Roll = 111 tons.

(2) Pressure being released, the bagasse expanded so as to raise the free end of the roll 0.172″ and the geared end 0.0468″.

(3) After backing off lower rolls and returning the top roll to its original position the pressure was 55.0 tons.

The turnplate area, neglecting the extended area of the scrapper tops, was found to be 120.75 sq. in.

Thus the turnplate pressure =

$$\frac{55 \times 2000}{120.75} = 911 \ \#/\text{sq. in.}$$

All linear measurements were taken by calipers.

These results may be somewhat high because the two lower rolls could be backed off only about 3/8″, thus there was some pressure between the rolls. Since the bagasse expanded only a little more than 1/8″ at the top, it would seem that the pressure between the rolls would be small in comparison to the above value.

Test No. 2

The mill was fed heavy as in Test No. 1. The initial pressure on the top roll was 116.5 tons. The pressure was released and the top roll was raised by the expanding bagasse 5/32″ on the free end and 3/64″ on the geared end. The pressure was applied again until the top roll was in its original position. The pressure required to regain this position was 98 tons, or 18.5 tons less than the original pressure, thus showing that the bagasse is more easily recompressed or that some juice is removed upon recompression, even though the space between the turnplate and rolls remains the same.

The pressure was released again and the bottom rolls were lowered. Then pressure was released again and the bottom rolls were lowered. Then pressure was re-applied until the roll was in its original position. The resulting pressure was 57.5 tons.

Unit turnplate pressure =

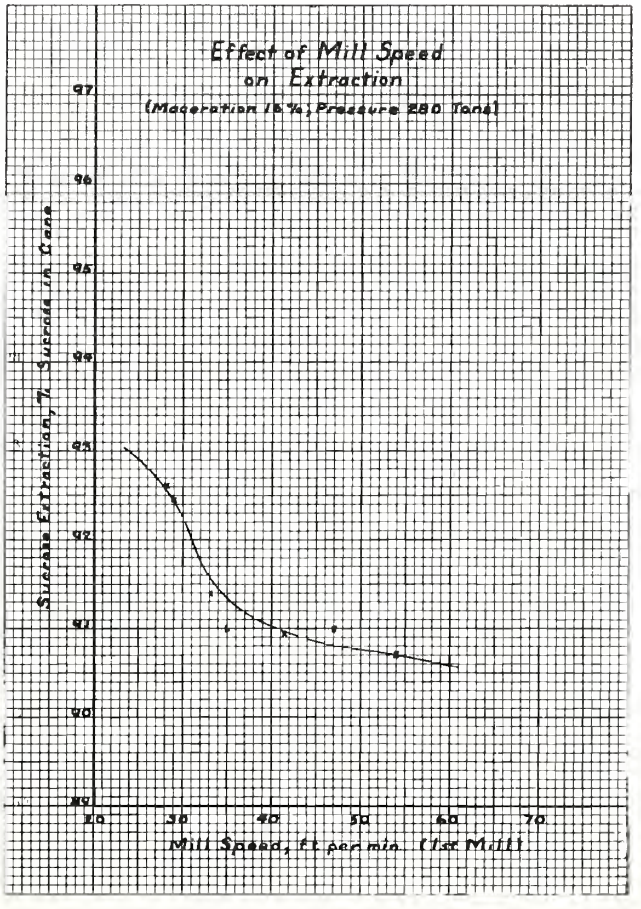
$$\frac{57.5 \times 2000}{120.75} = 954 \ \#/\text{sq. in.}$$

Test No. 3

The initial pressure on the top roll was 88 tons. The pressure was released and the top roll was raised 1/″ on the free end. The same pressure was applied and it was found that the roll was lowered 1/64″ farther than originally, showing that the bagasse is compressed more by applying the same load repeatedly, which agrees with Test No. 2.

In each of the above tests, the feed opening was 3/8″ and the discharge opening was 1/32″. The distance between the turnplate and top roll was estimated as 9/16″.

FIGURE 3



RECAPITUALTION OF FINAL MANUFACTURING REPORTS OF LOUISIANA SUGAR MILLS (CROPS 1934-1940) A. A. A. Records

	1934	1935	1936	1937	1938	1939	1940
Crop Days	58.0	68.6	80.0	80.06	73.30	63.82	39.85
Time lost % of total time	16.49	15.89	18.61	20.81	13.43	13.00	15.91
Cane C Tons Ground	3,163,901	4,182,715	4,941,235	5,240,675	5,858,871	5,083,657	2,923,204
% of Total Cane Ground	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Tons Ground per Hour	38.83	42.17	51.98	50.75	53.38	56.10	54.25
Extraction N. J. % Cane	72.64	72.63	75.51	74.69	75.61	75.66	75.16
Sucrose Extraction	90.37	90.71	91.26	91.32	91.44	91.74	91.30
Saturation % Cane	18.26	16.39	14.77	14.479	16.10	15.78	15.00
Fiber % Cane	14.92	13.92	13.22	12.36	13.66	13.57	13.06
Java Ratio	75.39	77.54	78.63	77.51	78.71	78.23	78.19
Analyses							
Crusher Juice Brix	16.04	16.42	16.11	15.86	16.59	16.75	15.81
Brix Factor (Final Report)	97.05	97.08	97.27	97.47	97.35	97.25	97.22
Sucrose Factor (Final Report)	93.62	94.50	94.87	94.91	95.20	94.89	94.98
Normal Juice Brix	15.58	15.94	15.67	15.42	16.15	16.29	15.37
Normal Juice Sucrose	12.22	12.46	11.84	11.76	12.50	12.63	11.93
Normal Juice Purity	78.36	78.17	75.56	76.26	77.40	75.53	77.62
Factory Sirup Brix	57.06	57.56	59.23	58.33	58.88	59.24	58.52
Bagasse:—% Sucrose	3.17	3.07	3.09	2.92	3.06	3.04	3.07
Bagasse:—% Moisture	48.53	47.95	47.97	48.38	47.69	47.69	48.94
Bagasse:—% Fiber	47.35	47.69	47.86	47.53	47.44	47.88	46.95
Press Cake, Sucrose	5.12	5.47	5.25	5.08	4.76	4.45	3.93
Residual Juice Brix		6.57	6.20	6.29	6.13	6.22	5.84
Sucrose Balauce							
Sucrose in Molasses % Cane	0.920	0.864	0.930	1.004	1.022	0.964	0.969
Sucrose in Press Cake % Cane	0.090	0.082	0.096	0.111	0.097	0.082	0.082
Sucrose in Undetermined % Cane	0.150	0.135	0.201	0.201	0.220	0.179	0.141
Sucrose in Bagasse % Cane	0.950	0.944	0.858	0.848	0.884	0.860	0.854
Sucrose Total Losses % Cane	2.110	2.025	2.085	2.224	2.225	2.085	2.046
Sucrose Sugars % Cane	7.750	8.121	7.729	7.412	8.110	8.328	7.775
Total Sucrose % Cane	9.860	10.146	9.814	9.635	10.335	10.413	9.821
Average Rolls per Tandem	-----	8.82	9.13	10.78	10.01	10.12	10.24
Average Crushers per Tandem	-----	0.89	1.03	0.88	0.92	0.92	0.94
Average Knives per Tandem	-----	0.89	0.90	0.99	0.95	0.92	0.96
Lbs. 96° Sugar M&E T/C	153.22	168.66	160.993	154.391	168.96	173.68	161.98
Gals. Final Molasses M&E T/C	5.6	5.94	6.520	6.57	6.48	6.64	6.28
Boiling House Efficiency	98.56	99.77	99.290	95.281	97.16	98.68	98.00
Gals. Oil and Oil Equivalent T/C	4.70	3.83	5.940	-----	-----	-----	-----

PROPORTIONATE SHARES ACRES HARVESTED FOR SUGAR—YIELD OF SUGARCANE PER ACRE AND YIELD OF RECOVERABLE SUGAR PER ACRE OF LOUISIANA FAR MS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES FROM A. A. A. REPORTS

PARISHES	Proportionate Shares Harvested for Sugar (acres)			Yield of Cane per Acre Tons			Yield of Recoverable Sugar per Acre—CWT		
	1937	1938	1939	1937	1938	1939	1937	1938	1939
Acadia	13.0	4.3		7.85	14.84		10.98	22.21	
Ascension	10,494.8	8,952.6	9,116.7	17.92	20.20	19.58	26.59	32.52	31.99
Assumption	21,291.9	21,583.5	19,856.7	23.21	24.35	24.92	36.51	40.74	42.69
Avoyelles	3,370.6	3,949.8	2,325.3	18.22	18.79	22.93	28.12	31.54	38.25
E. Baton Rouge	727.0	712.0	564.3	16.74	17.94	18.36	24.83	28.64	30.48
Evangeline	20.9	38.6	26.5	12.08	13.65	16.03	20.65	22 76	28.35
Iberia	29,751.2	31,635.7	25,748.1	19.03	19.72	22.06	29.06	34.18	37.15
Iberville	22,075.7	21,698.4	19,073.2	22.33	23.17	22.93	32.50	37.48	39.22
Jefferson			93.8			7.85			14.18
Lafayette	13,368.4	13,535.8	12,399.1	14.94	15.90	16.79	22.02	27.15	28.06
Lafourche	19,389.2	21,196.9	17,292.5	22.37	24.91	23.38	36.38	41.86	39.97
Plaquemine	641.4	149.8	68.3	10.88	11.51	7.02	16.98	20.75	13.02
Pointe Coupee	12,726.4	13,026.0	11,760.2	17.80	20.48	20.54	27.98	32.34	34.60
Rapides	2,166.3	2,307.1	2,320.0	19.75	20.04	21.15	31.16	33.22	35.13
St. Bernard	164.4			11.51			15.70		
St. Charles	2,403.1	3,004.2	2,343.9	15.19	17.64	15.67	22.82	28.60	26.48
St. James	11,957.4	12,125.2	10,302.5	19.44	21.23	21.25	31.63	35.10	36.49
St. John	14,334.9	13,168.1	10,984.1	21.64	23.29	22.73	34.98	39.72	40.66
St. Landry	1,954.1	2,155.7	1,984.9	17.33	20.84	19.21	27.16	32.62	31.41
St. Martin	13,339.4	15,848.6	15,658.1	15.65	19.99	18.29	23.96	33.27	29.99
St. Mary	26,191.0	26,062.9	22,178.7	19.52	22.46	18.97	31.72	38.92	39.25
Terrebonne	29,739.9	31,290.1	24,914.3	20.94	21.73	21.36	32.52	37.85	36.47
Vermilion	11,190.8	10,969.6	9,998.3	16.00	20.17	20.97	24.25	32.75	33.69
W. Baton Rouge	15,097.1	14,867.4	12,685.8	20.46	21.54	20.96	32.53	34.87	36.07
W. Feliciana	3,626.3	3,514.7	2,622.2	23.56	29.46	26.59	32.30	44.57	45.71
TOTAL	266,035.2	271,797.0	234,317.5	19.76	21.59	21.23	30.72	36.17	36.66

CROPLAND—PROPORTIONATE SHARE—PLANTED ACRES OF LOUISIANA SUGARCANE FARMS PARTICIPATING IN THE SUGAR PROGRAM (SUGAR ACT OF 1937) BY PARISHES, FROM A. A. A. REPORTS

PARISHES	Cropland (Acres)			Proportionate Shares (Acres)			Total Planted (Acres)		
	1937	1938	1939	1937	1938	1939	1937	1938	1939
Acadia	682.0	255.4		20.5	19.3		20.5	4.3	
Ascension	36,033.0	32,408.9	34,729.6	12,625.8	12,767.2	11,782.7	12,625.8	9,730.8	10,147.8
Assumption	47,999.0	45,460.0	47,213.6	25,482.3	23,893.9	22,788.4	25,482.3	23,802.6	23,837.4
Avoyelles	20,855.0	21,969.0	17,196.2	3,846.5	6,757.2	3,148.7	3,846.5	4,277.7	2,780.7
E. Baton Rouge	7,509.0	4,692.8	3,861.9	791.7	1,486.3	804.1	791.7	751.1	624.6
Evangeline	830.0	942.5	786.5	22.7	76.6	65.0	22.7	40.6	29.5
Iberia	73,670.0	84,616.2	84,587.3	36,315.1	35,908.0	29,606.7	36,315.1	35,429.4	31,116.9
Iberville	49,383.0	53,053.8	53,439.6	24,408.0	25,531.3	21,310.1	24,408.0	23,606.7	21,439.6
Jefferson			461.8			125.5			102.7
Lafayette	63,002.0	63,305.8	62,228.9	15,384.7	21,927.1	16,701.9	15,384.7	15,074.7	13,521.0
Lafourche	48,777.0	55,172.0	52,527.1	23,380.7	24,328.7	18,848.5	23,380.7	22,995.5	18,662.0
Plaquemine	2,402.0	532.2	239.0	897.9	209.3	82.8	897.9	157.0	86.1
Pointe Coupee	49,645.0	53,638.1	54,642.7	13,878.4	18,342.7	16,149.2	13,878.4	14,122.2	12,948.9
Rapides	16,624.0	16,574.4	19,936.3	2,367.9	4,692.4	2,903.0	2,367.9	2,492.6	2,507.5
St. Bernard	917.0			352.6			352.6		
St. Charles	7,016.0	7,540.0	7,084.0	2,826.1	3,564.4	2,876.9	2,826.1	3,141.8	2,557.9
St. James	30,694.0	32,879.2	33,293.0	12,895.6	13,786.4	11,578.7	12,895.6	13,315.8	11,398.1
St. John	27,724.0	29,192.4	28,090.0	15,300.8	14,596.3	12,405.2	15,300.8	14,254.3	12,520.6
St. Landry	17,237.0	20,218.0	20,137.0	2,367.4	3,183.5	2,884.8	2,367.4	2,521.7	2,218.5
St. Martin	56,931.0	63,524.6	64,619.1	17,711.0	23,514.3	21,784.9	17,711.0	17,655.6	17,497.9
St. Mary	56,918.0	58,140.9	57,756.8	29,216.9	28,766.3	24,473.9	29,216.9	28,217.8	26,541.0
Terrebonne	61,683.0	66,808.4	67,023.2	35,872.8	34,222.4	27,922.0	35,872.8	33,570.0	28,013.2
Vermilion	61,988.0	62,363.6	67,469.7	12,796.6	17,693.4	13,575.9	12,796.6	12,231.0	11,320.2
W. Baton Rouge	30,067.0	31,918.3	32,690.3	16,238.6	17,628.8	14,409.0	16,238.6	16,044.7	14,166.3
W. Feliciana	12,044.0	11,653.6	9,775.6	3,803.9	3,617.5	2,713.1	3,803.9	3,787.9	3,578.3
Total	780,630.0	816,860.1	819,789.2	308,804.5	336,513.3	278,941.0	308,807.5	317,225.8	267,616.7

Mainland Sugarcane Area Wage and Price Hearings Scheduled

Washington, D. C., June 11, 1941.

The Department of Agriculture today announced that public hearings will be held this month in Louisiana and Florida for the purpose of receiving evidence on fair prices for the 1941 crop of sugarcane and on wage rates for persons employed in the harvesting of that crop.

The Sugar Act of 1937 provides, as one of the conditions of payment to growers, that all persons employed in the production, cultivation or harvesting of sugarcane be paid at rates not less than those determined by the Secretary to be fair and reasonable. The Act also provides for a determination by the Secretary of fair and reasonable prices to be paid for sugarcane purchased by processors who as producers apply for sugar payments.

The Sugar Division of the Agricultural Adjustment Administration stated that the hearings will be held as follows:

June 20, Clewiston, Florida, Clewiston High School Auditorium;

June 23, New Orleans, Louisiana, Assn. of Commerce Bldg.;

June 25, New Iberia, Louisiana, New Courthouse;

June 27, Donaldsonville, Louisiana, Courthouse.

The Louisiana hearings will start at 9:30 a.m., and the one in Florida at 9 a.m.

Sugar Consumption Estimate Increased

Washington, D. C., June 9, 1941.

The Department of Agriculture today announced an increase in the estimate of consumers' requirements of sugar for the calendar year from the estimate of 6,851,889 short tons, raw value, announced March 19, 1941, to 7,125,561 tons, an increase of 273,672 tons.

The Sugar Act of 1937 directs the Secretary to make an initial determination of consumers' requirements in December for the following calendar year, and to make any necessary adjustments during the year. The initial estimate of 6,616,817 tons, was announced December 7, 1940, and the first 1941 revision was made on March 19. The Sugar Division of the Agricultural Adjustment Administration stated that the present revision follows receipt of complete official data on stocks, distribution or usage, and other factors for the first part of the year which the Secretary is required to take into consideration under the Act.

The quotas for the various sugar-producing areas under the revised figures compare with the former quotas as follows:

Domestic Areas	Present Determination	Determination of March 19, 1941
	(short tons, raw value)	
Continental Beet	1,652,571	1,589,100
Mainland Cane (Louisiana & Florida)	448,000	430,794
Hawaii	1,000,177	961,764
Puerto Rico	850,844	818,166
Virgin Islands	9,507	9,141
Under U. S. Sovereignty		
Commonwealth of Philippine Islands	1,024,836[1]	982,663[2]
Foreign Areas:		
Cuba	2,038,230	1,959,947
Foreign countries other than Cuba	101,396[3]	100,314[3]
	7,125,561	6,851,889

Deliveries for consumption totalled 6,890,792 tons in 1940 and 6,867,533 tons in 1939. The present estimate of consumers' sugar requirements represents an increase of about 3-1/2 percent over average deliveries of these two years.

[1] Quota of 1,098,068 tons less 73,232 tons reallotted to foreign countries other than Cuba, on April 11, 1941.

[2] Quota of 1,055,895 tons, less 73,232 tons reallotted to foreign countries other than Cuba.

[3] Original quota plus 73,232 tons reallotted from Philippine quota on April 11.

Allotment of 1941 Beet Sugar Quota For Processors Announced

Washington, D. C., May 9, 1941

The Department of Agriculture announced today the allotment of the 1941 beet sugar quota of 1,589,100 short tons, raw value, to the 24 beet sugar processing companies.

The Sugar Act of 1937 directs the Secretary of

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Agriculture to allot the sugar marketing quota for any area if he finds that such allotment is necessary to prevent disorderly marketing, to give all interested persons an equitable opportunity to market sugar, or for other causes.

The allotments were computed by giving 25 percent weight to past marketings, and 75 percent weight to processings of sugar beets grown on proportionate share acreages (acreage allotments), and were then modified so as to bring the inventories of the various companies into closer relationship with the normal carryover requirements of the Sugar Act. Past marketings have been measured by the average quantity of sugar marketed during the three calendar years 1937, 1938 and 1939. Processings of sugar beets produced on acreage allotments have been measured by the average amounts of the processings from such beets for the largest three of the 1937, 1938, 1939, and 1940 crops. The allotments give effect to a provision that no processor may (as long as the quota for the area is less than 1,756,509 short tons) market in 1941, sugar in excess of his January 1, 1941, effective inventory, unless such inventory was less than 75% of the processor's average marketings. The balances made available by this provision have been reallotted to processors whose inventory carryover as of January 1, 1941, was unusually large.

Interested persons were advised on March 26 following public hearing as to how it was proposed to allot the area quota. Objections and exceptions were then filed by many of the persons affected by the proposed allotment.

The following are the allotments for 1941:

Processor	*Allotment* (short tons, raw value)
Amalgamated Sugar Co.	119,366
American Crystal Sugar Co.	186,218
Central Sugar Company	12,107
Franklin County Sugar Co.	13,441
Garden City Company	12,022
Great Lakes Sugar Co.	38,147
Great Western Sugar Co.	424,402
Gunnison Sugars, Inc.	7,086
Holly Sugar Corporation	231,720
Isabella Sugar Co.	9,894
Lake Shore Sugar Co.	13,552
Layton Sugar Co.	8,537
Los Alamitos Sugar Co.	17,127
Menominee Sugar Co.	9,826
Michigan Sugar Company	71,476
Monitor Sugar, Division Robert Gage Coal Co.	17,173
Mt. Clemens Beet Growers' Association	4,514
National Sugar Mfg. Co.	7,817
Ohio Sugar Company	7,901
Paulding Sugar Co.	7,340
Spreckels Sugar Co.	173,581
Superior Sugar Refining Co.	12,088
Union Sugar Co.	26,097
Utah-Idaho Sugar Co.	157,668
Others	0
Total	1,589,100

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Puerto Rican Sugar Processors' Marketing Allotments For 1941 Announced

Washington, D. C., May 13, 1941.

The Department of Agriculture today announced Puerto Rican processor marketing allotments, covering the 1941 Puerto Rican sugar quota, of 818,166 short tons, raw value, for continental United States, and of 69,052 tons for consumption in Puerto Rico. These allotments represent the amount of sugar which processors in Puerto Rico may market on the mainland and in Puerto Rico during the calendar year 1941 under existing quotas.

The Sugar Act of 1937 directs the Secretary of Agriculture to allot the sugar marketing quota for any area if he finds that such allotment is necessary to prevent disorderly marketing and importation, to give all interested persons a fair opportunity to market sugar within an area's quota, or for other causes.

The Sugar Division of the Agricultural Adjustment Administration pointed out that allotment of the Puerto Rican sugar quota has been made each year since enactment of sugar legislation in 1934.

The marketing allotments are as follows:

Name of Processor	*Continental U. S. Marketing Allotment* (short tons, raw value)	*Allotment for Local Consumption* (short tons, raw value)
Aguirre	83,534	7,050
Boca Chica and Mercedita	43,911	3,706
Cambalache	35,166	2,968
Canovanas and Fajardo	80,748	6,815
Canos	15,978	1,349
Carmen	14,518	1,225
Caribe	7,190	607
Coloso	34,920	2,947
Constancia-Ponce	6,690	565
Constancia-Toa	20,055	1,693
El Ejemplol and Roig	34,678	2,927
Eureka	19,093	1,611
Eastern Sugar Associates	79,613	6,719
Guamani	9,663	816
Guanica	71,302	6,018
Herminia	1,790	151
Igualdad	29,156	2,461
Juanita	21,577	1,821
Lafayette	25,360	2,140
Monserrate	11,579	977
Pellejas	4,398	371
Plata	15,355	1,296
Playa Grande	7,313	617
Plazuela	18,870	1,593
Rio Llano and Soller	14,606	1,233
Rochelaise	8,515	719
Rufina	24,704	2,085
San Francisco	5,846	493
Santa Barbara	2,907	245
San Vicente	30,157	2,545
San Jose, Inc.	14,695	1,240
Victoria	16,539	1,396
Subtotal	810,426	68,399
Reserve for future allotment	7,740	653
Total	818,166	69,052

Any increase or decrease in quotas during the year will be prorated among processors on the basis established in the allotment order.

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Fred Wilks
R. F. D. No. 3, STUTTGART, ARKANSAS

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*This is a voluntary statement for which no compensation of any description was given to Messrs. Wilks.

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Excerpts from 1940 Report of W. E. Williams County Agent, Iberia Parish

"Sugar cane is the major cash crop of Iberia Parish. Therefore the Agent devoted a major portion of his time to sugar cane work.

Sugar Cane Varieties

"The development and distribution of new improved varieties of sugar cane have played a major roll in the improvement of the sugar industry of the parish. In the late twenties and early thirties the standard varieties of sugar cane were the POJ's, which gave on an average of approximately 11 to 14 tons per acre. Since replacing these varieties with new improved ones the average production of sugarcane per acre during the past five years has averaged between 18 and 21 tons per acre. Of course full credit for this tremendous increase in production cannot be given entirely to new varieties, as soil improvement, improved cultivation, proper fertilization, and disease control have contributed materially to the improvement of the sugar industry.

"The chronological order of the release for general planting of the improved sugar cane varieties now in use are as follows: in 1933 the CO-290; 1934 the CP-28-19 and CP-28-11; in 1935 the CP-29-320; 1936 the CP-29-116; and in 1939 CP-29-103 and CP-29-120.

Cultivation

"The sugar station at the Louisiana State University has found by experiment work that proper cultivation of sugar cane plays an important part in the economical production of that crop. Their findings indicate that early deep plowing followed by shallow cultivation and early lay-by increase the yields and sucrose content of sugar cane. Following their findings the County Agents have through method demonstrations and other means at their command helped to teach the farmers the value of improved cultural practices.

"In all cases where cooperating farmers putting on demonstrations followed the recommended method they have obtained satisfactory results and they and their neighbors in most cases have adopted fully or in modified form the recommended cultural practices as advocated by the Extension Service and the Sugar Station. It is conservatively estimated that 60 to 70% of our farmers are now cultivating their cane according to the sugar station's recommendations. Most all of the cane in this parish, whenever possible, is laid by in early May while just a few years ago it was not uncommon to see sugar cane growers plowing their cane as late as July.

"It is obvious, from results obtained by farmers of the parish that the educational work in the cultivation of sugar cane has been very helpful to the sugar growers of the parish.

Sugar Cane Diseases

"The Mosaic disease in CO-290 has been spreading rather rapidly for the past two years. This is causing some alarm among the cane growers of the parish as diseased cane does not produce tonnage equal to healthy cane. Records show that cane heavily infested with Mosaic disease will yield less than healthy cane by as much as 20%.

"Inasmuch as CO-290 is the best adopted variety of sugar cane for practically all lands in Iberia Parish the agent realizes the importance of trying to keep it as free of disease as possible. Therefore, the importance of controlling this disease through rogueing the only practical means of control known at present, has been stressed very empathically during the past two years. Fortunately many of our leading growers realize the importance of this work and are cooperating by rogueing seed plots.

"In 1939 the agent conducted a result demonstration to show the effects in yields of Mosaic on the CO-290 variety. The results obtained showed that the yields were lowered by approximately 2.4 tons per acre.

"In 1940 the agent gave 14 demonstrations on different farms in different sections of the parish as to the proper procedure in rogueing cane for Mosaic disease.

"Inasmuch as approximately 25,000 acres of cane

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in Iberia Parish is of the 290 variety it is easy to see the losses that would result to the parish if the disease spreads throughout the parish and all of the cane would have 100% Mosaic infestation."

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THE SUGAR BULLETIN

Entered to the second-class of mail matter April 13, 1925 at the post office at New Orleans, La., under Act of March 3, 1879

We stand for the encouragement of Home Industries as against foreign Competition

Vol. 19 NEW ORLEANS, LA., JULY 1, 1941 No. 19

Release of New Sugar Cane Variety

SUGAR CANE VARIETY CP 33-243, BY JOINT ACTION OF THE BUREAU OF PLANT INDUSTRY, UNITED STATES DEPARTMENT OF AGRICULTURE, THE LOUISIANA AGRICULTURAL EXPERIMENT STATION AND THE AMERICAN SUGAR CANE LEAGUE OF THE U.S.A., INC., IS HEREBY RELEASED FOR COMMERCIAL PLANTINGS IN LOUISIANA THIS FALL.

THE PROCEDURE FOR RELEASE AND PROPER PRORATION OF THE SEED CANE TO THE LOUISIANA PLANTERS, THE APPLICATION FORMS AND THE TIME LIMIT DURING WHICH APPLICATIONS WILL BE RECEIVED FROM THE PLANTERS WILL APPEAR IN THE SUGAR BULLETIN OF AUGUST 1, 1941.

In accordance with established procedure, the three cooperating agencies which are working together in the development of improved sugarcane varieties for Louisiana, viz., the Division of Sugar Plant Investigations of the Bureau of Plant Industry, United States Department of Agriculture, the Louisiana State Agricultural Experiment Station, and the American Sugar Cane League of the U. S. A., Inc, have jointly approved the release of C.P. 33/243 for commercial planting in the fall of 1941.

C.P. 33/243 is an erect cane with a type of top intermediate between that of Co. 281 and Co. 290 and a stalk diameter about equal to that of Co. 290. It is resistant to mosaic and appears approximately equal to Co. 281 in susceptibility to root rot. It may take chlorotic streak, but the observed very moderate rate of spread indicates that it may readily be kept free from the disease by roguing and selection of disease free seed cane, or by hot water treatment of seed cane. Results of artifical inoculation tests have shown C.P. 33/243 to be very susceptible to red rot. However, only very slight red rot injury observed in field plantings in the spring of 1941, together with the fact that extensive injury has been observed in only a few instances during the five years in which this variety has been under observation in field tests indicates that it is not likely to be extensively injured by strains of the red rot organism now prevalent in Louisiana. No predictions can be made with respect to highly specialized strains which may become prevalent in the future. C.P. 33/243 exhibits excellent vigor as plant cane but has a tendency to diminish in this respect as stubble. In all tests conducted to date, it has exceeded Co. 281 in yield of sugar per ton of cane by a slight margin only but has exceeded that variety in average yield of sugar per acre from plant cane and stubble tests by approximately 30 per cent.

While tests of C.P. 33/243 have not been conducted over a sufficient period to permit of final conclusions concerning whether it will prove better adapted for culture in all areas than varieties now grown in Louisiana, the cooperating agencies mutually believe that it will valuably supplement the present assortment of commercial varieties and serve as a provision against possible further disease deterioration of some of the varieties now grown. We recommend that growers try C.P. 33/243 but that they restrict plantings to relatively small acreages

THE
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Marcel J. Voorhies, Editor
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The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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until after they have determined for themselves whether this variety is more suitable than varieties which they now grow.

E. W. Brandes, Head Pathologist in Charge, Division of Sugar Plant Investigation, U. S. Department of Agriculture
W. G. Taggart, Assistant Director of Experiment Stations, State of Louisiana
W.F. Giles, President, American Sugar Cane League of the U. S. A., Inc.

Committee Recommendations With Respect to Seed Sugar Cane Quarantine

At a joint meeting of the Contact Committee of the American Sugar Cane League and the Agricultural Section of the Louisiana Sugar Cane Technologists Association held at Houma, Louisiana, on June 5, 1941, the following resolution was unanimously adopted:

"WHEREAS, It has been deemed advisable to establish quarantine regulations on transfer of sugarcane plant material from other cane-growing areas to Louisiana in order to prevent the introduction of new cane diseases or harmful insects into the sugar district,

"THEREFORE, BE IT RESOLVED That this gathering go on record as approving the quarantine regulations and agree to lend individual effort to conform to these regulations and support all measures for making the regulations effective."

DEPARTMENT OF AGRICULTURE AND IMMIGRATION, STATE OF LOUISIANA
BATON ROUGE

June 5, 1941.

Mr. Paul G. Borron, Jr.
Attorney at Law
Plaquemine, Louisiana
Dear Mr. Barron:

Your letter of May 29, addressed to the Department of Agriculture, has been referred to me for reply.

Commissioner Wilson and I appreciate the interest taken by the American Sugar Cane League in the sugar cane industry of Louisiana; and it is our feeling that a great deal can be done by this organization in cooperating with our Department, towards preventing the introduction of an insect pest or plant disease that would be detrimental to the growing of sugar cane in our State; likewise, to eradicate any incipient infestation of a serious insect pest or plant disease that might temporarily have gained a foothold.

Under the authority vested in the Department of Agriculture, the enclosed copy of regulation was promulgated sometime ago.

If we can be of further service to you, please call on us; or, if you have any suggestions, we would be pleased to have you or members of the Sugar Cane League convey them to us.

With kindest regards, I am

Sincerely yours,
W. E. Anderson
State Entomologist

Sugar Cane Quarantine (State of Louisiana)

Whereas, it has been determined that especially injurious insect pests and plant diseases of the sugar cane do exist in other states and territories of the United States and foreign countries, causing a great deal of injury to the sugar cane, and which are not known to occur in Louisiana.

Therefore, to prevent the introduction and dissemination of these injurious insect pests and plant diseases into Louisiana, the shipment or movement of all sugar cane or parts thereof, (including all parts of the plant), and sugar cane parts which have been manufactured or processed, (except sugar and syrup) into the State of Louisiana is hereby prohibited, except under Special Permit issued by the Louisiana Department of Agriculture and Immigration.

Rule I. A special permit will be issued by the Louisiana Department of Agriculture and Immigration authorizing shipments of sugar cane or parts thereof and sugar cane parts that have been manufactured or processed into Louisiana for experimental or other purposes from all other states and territories of the United States and from foreign countries, after the shipper has furnished the Louisiana Department of Agriculture and Immigration with name and address of consignor and consignee and with satisfactory evidence as to point of origin, freedom from infestation, or as to prior treatment that will

prevent the introduction of any dangerous insect pest or plant disease of sugar cane.

The above quarantine is promulgated in accordance with Act No. 36 of the General Assembly of 1910 and shall have the full force and effect of law on and after October 15th, 1928.

Penalties for Violating Sugarcane Quarantine Regulations

Section or par. 5, Act of 1910:

"Any person, firm or corporation violating any of the rules ordinances, or regulations of said board of agriculture and immigration shall be deemed guilty of a misdemeanor and shall upon conviction thereof, be punished by a fine of not less than twenty five ($25.00) Dollars, nor more than five hundred ($500.00) Dollars, or imprisoned for not less than ten (10) days, nor more than six (6) months, or both such fine and imprisonment at the discretion of the court having jurisdiction; said board of agriculture and immigration shall have power and authority to enforce its rules, ordinances and regulations in any court of competent jurisdiction by civil, as well as criminal proceedings, and if the remedy elected to be pursued be by writ of injunction, no court of this state shall have the right previous to a trial upon the merits to set aside such a writ on bond; it shall be the duty of the attorney-general and district attorneys to represent said board whenever called upon so to do; said board, in the discharge of its duties, and in the enforcement of the powers herein delegated, may send for books and papers, administer oaths, hear witnesses, etc., and to that it is made the duty of the various sheriffs throughout the state to serve all summons and other papers upon the request of said board."

If Sugar Can't Swim, What Should Congress Do About It?

(By C. J. Bourg)

No move has yet been made in Congress or by the Administration for an extension of the Sugar Act. It is now expected that, due to defense problems, Congress will remain in session throughout the year. As appropriation bills will be largely out of the way by the beginning of the fiscal year on July 1st, there may be opportunity in the last six months of 1941 to determine whether an extension of the Sugar Act is desirable. In the opinion of well-informed observers, there are two principal reasons why no action has been taken: The first is that Congress is evidently awaiting war developments to see what happens with regard to supplies, shipping, and costs of transportation; the other is that, if the sugar program is to be continued to the satisfaction and for the benefit of domestic producers, then several major amendments to the Sugar Act must be seriously considered.

Sugar statistics are being studied rather carefully and are being divided into three groups to distinguish between world supplies, hemisphere supplies, and national supplies. Naturally, there is confusion about these statistics in the minds of the public; but it is becoming clearer each day to Members of Congress that regardless of how much sugar there is in the world, and even in the Western Hemisphere, the question of whether there is an ample supply of sugar available to consumers of the United States depends upon that sugar being in, or having arrived within, the boundries of the 48 States.

The New York Journal of Commerce recently announced the appropriate truism that "Sugar can't swim." There must be boats to bring the sugar into United States ports; there must be shipping space not otherwise given over to strategic materials by priorities; the freight rates and the war risk insurance rates must not be prohibitive. Those of us with long memories, and who have re-examined the facts of what happened during the 1907-1920 World War period, remember that there were considerable supplies of sugar in existence then; but the problem was to transport the sugar from the distant sources of supply.

Currently, we have the example of England which is no longer able to depend upon India, Australia, New Zealand, or Java for sugar, despite the fact that there are quantities of sugar in those areas sufficient to provide the needs of England. For evident reasons, there are overseas transportation problems which have practically shut off these normal sources of supply. England has bought some sugar from the Western Hemisphere each year, and it is well known that the British have been negotiating lately for sugar with Cuba and the Dominican Republic, in addition to the British West Indies. The British Minister of Foods only recently indicated that the English would need more sugar from the Western Hemisphere by suggesting that the United States might begin to think in terms of "sugarless and meatless days." Admitting that this was putting it rather strongly; nevertheless there is some significance, at least for future consideration. England normally consumes 2½ million tons annually.

The Department of Agriculture has recently published a comprehensive discussion of the World Sugar Situation. Based upon the statistics compiled and analyzed by the Bureau of Agricultural Economics, the opinion was expressed that the production of sugar in the Western Hemisphere since September 1940, plus the carryover stocks, assure a total supply available to the United States during 1941 in excess of the normal consumption of recent years. Statistically, that is true. Whether it is true practically, only the future can reveal. The domestic sugar producer will accept as correct the figures used by the Department to show that the total stocks of sugar available for the United States during the calendar year 1941 have been 8,900,000 tons. But to agree that such stocks are available in practice requires the domestic producer to assume that there will be unhampered and uninterrupted delivery into United States ports of all quantities of sugar said to be available from offshore areas. We must add that this figure of availables is likewise subject to the requirements of England for sugar from the Western Hemisphere under the Lend-Lease program, by which we have become the furnisher of foods as well as munitions to the British. Some consideration must also be given to the security which must be given the consumer by maintaining the normal carryover stocks of sugar into the new year.

Making no pretentions at prophesy and recognizing no necessity for the declaration as to what the eventualities of war are likely to be, we can offer some food for thought, perhaps interestingly, in connection

with the conclusions drawn by the Department of Agriculture for its analysis of the World Sugar Situation.

The officials statistics of the Sugar Division report that deliveries for consumption during the first five months of 1941 have been 829,000 tons greater than they were in the first five months of 1940. That fact is established, and domestic producers are well able to judge for themselves whether that trend is likely to continue. For instance, the canning and preserving season always means a heavy consumption of sugar, and that season is just beginning. The advancing wage-scale of labor and the disappearance of unemployment are certainly contributing to the improved purchasing power of the American consumer. Therefore, it is hardly reasonable to confine ourselves to the past record exclusively when we seek to anticipate consumption requirements in the United States. In fact, the Secretary of Agriculture himself early in June recognized the abnormal trend of consumption by raising his estimate for 6,851,000 short tons to 7,125,000 short tons. An examination of the record indicates that the United States has never consumed as much as 7,000,000 tons of sugar in any calendar year. A large majority of the producers and handlers of sugar is convinced that the estimate of the Secretary will have to be lifted even higher before the end of the year, perhaps very much sooner.

There are no statistics published which can be referred to for the purpose of determining whether the consumption of sugar in other countries of the Western Hemisphere is following the same trend upward as in the United States; but it certainly is safe to assume that there will be no decrease in Hemisphere consumption. Therefore, if the Hemisphere consumption of sugar for 1941 continues above normal, the added requirement of furnishing sugar to England will give new significance to the figure of 8,900,000 tons. Finally, this figure includes Hawaii and the Philippine Islands. According to latest reports (five months' entries) Hawaii has only imported 334,986 tons of sugar out of a quota of 1,000,-177 tons, and the Philippines have only imported 537,170 tons of their duty-free quota of 982,633 tons. Besides, the 8,900,000-ton figure includes the 1940 production in the Philippines which the B.A.E. reports at 1,282,000 tons, notwithstanding the fact that the Filipino policy is not to import any full-duty sugar into the United States.

The above discussion of sugar supplies is primarily important to domestic producers because the experience of 1941 will furnish to Congress a realistic set of facts showing the value of the domestic sugar industry to the consumer, in relation to adequate supplies and reasonable prices. The "availability" of sugar will necessarily determine future changes in the estimate of consumption by the Secretary of Agriculture. This is important to domestic producers because, in our opinion, it will be possible for the Secretary to continue to increase quotas from time to time and as required,—without restoring to the drastic expediency of recommending that the President suspend quotas, which would be tantamount to an admission by the Administration that the present Sugar Act cannot function properly in an emergency.

Considering all of the facts outlined and discussed above (remembering that for the 1941 crop the Department of Agriculture has curtailed the acreage in the Mainland Cane Area by 9.75% and has curtailed the acreage in the Domestic Beet Area by 16.9% in the face of an "unlimited national emergency") and further considering that since January 1, 1941, the Department of Agriculture and other Government agencies have repeatedly taken action and issued statements designed to prevent excessive advances in the price of sugar, there is an evident reconstruction or re-adjustment of sugar policy of the Department contained in the following statement issued by the Department in response to inquiries concerning its policy on possible further revisions of sugar quota supplies under the Sugar Act of 1937:

"On June 9, 1941, an increase in the total quota supplies of sugar was announced by the Department. The quantity of 7,125,561 short tons of sugar established was deemed, on the basis of information then available to the Department, to be sufficient to meet actual consumption requirements for the calendar year 1941 and to provide reserve stocks equal to the average of prior years. However, investigations of the Sugar Division of the Agricultural Adjustment Administration, indicated that with the augmented industrial pace resulting for the national defense effort, buyers and consumers built up larger stocks of refined sugar than in previous years during the first three months of this year. Should this situation continue and if it becomes clear that for the duration of the emergency buyers and consumers wish to carry larger working stocks than in prior years, it will be the policy of the Department to increase quota supplies accordingly.

"With regard to the amount of available supplies to meet U. S. requirements, the Department has already pointed out in a recent survey of the Bureau of Agricultural Economics, on the sugar situation, that this season's production, together with relatively large carry-over stocks 'assures a total supply available to the U. S. well in excess of the current marketing quota and in excess of consumption during any year of the past. Besides this supply, there is in prospect well over a million tons of sugar available to the U. S. in other Western Hemisphere countries.' It also pointed out that the world supply of sugar for the 1940-41 marketing year is the largest supply on record."

Committee Meetings

The Louisiana sugar industry, through the American Sugar Cane League, divided the Louisiana sugar area into three districts in order to properly cooperate with the Louisiana Conservation Department to meet the stream pollution problems of the industry.

The industry, in a general meeting at Thibodaux on April 24, 1941, selected a stream pollution committee for each of the following areas: Group I, Mississippi River Area; Group II, Bayou Lafourche area; Group III, Bayou Teche Area.

The committee selected by the groups appear in the May 1, 1941, issue of *The Sugar Bulletin*, page 67.

The committee subsequently met as follows: The Mississippi River Area Committee met in the Geology Building, Louisiana State University, on May 14, 1941, and invited all of the mills in the area to be represented. The Committee met again at the same

place on May 29, 1941, and made its final recommendation to the over-all committee.

The Bayou Lafourche Area Committee met at Tallieu in the office of J. Aron & Company on May 5. 1941, and invited all of the mills in that area to be represented. On June 4, 1941, the committee had another meeting at the same place, at which it made its final recommendations to the over-all committee.

The Bayou Teche Area Committee had its first meeting in the office of Duhe & Bourgeois in Jeanerette on May 1, 1941. It held another meeting at the office of the New Iberia Sugar Cooperative on May 16, 1941, and made its final recommendation to the over-all committee.

At all of the above meetings representatives of the Louisiana Conservation Department were present and participated in the discussions.

On June 17, 1941, the general over-all committee met at Louisiana State University, Baton Rouge. It considered the recommendations of the three Area Committees and to around out the efforts of the various committees we are incorporating in this report the minutes of the over-all committee.

Geology Building
Baton Rouge, La.
June 17, 1941
8:00 P.M.

Mr. J. J. Munson, Chairman of the over-all committee of the American Sugar Cane League for stream pollution called a meeting of the technicians of each of the three group committees, namely, Mississippi River Group, Bayou Lafourche Area and Bayou Teche Area.

Present:Messrs. J. J. Munson, A. J. Keller, E. W. McNeil, A. J. Isacks and R. M. Murphy.

Absent: Messrs. Roland Caldwell and D. C. Palfrey.

Visitors: Messrs. Frank Coogan and Marcel J. Voorhies.

Since the organized cooperative effort of the Louisiana sugar Factories cooperating with the Louisiana Conservation Department to meet their stream pollution problem is in its initial stage, it is impossible for the Department to outline at the present time any method or methods of disposal which can be considered as satisfactory and a final solution to the problem of any one individual factory.

The Conservation Department will consider as having acted in good faith any or all factories which, during the coming grinding season, impound and keep out of the streams of the State all of their waste products except condenser legpipe discharge water.

The Conservation Department will be glad to take under separate consideration the problem of any individual mill where it is difficult to impound water and in such a case, when a mutually satisfactory arrangement is made, the factory will enjoy the status of acting in good faith.

The Committee unanimously makes the following recommendations to the Louisiana sugar factories:

1. THAT ALL FACTORIES IMPOUND ALL OF THEIR WASTE EXCEPT CONDENSER WATER, AND THAT IT BE KEPT OUT OF THE STREAMS OF THE STATE DURING THE GRINDING SEASON.

2. The Committee recommends that each sugar factory install a *BAFFLE* (wood or steel) in the last body of the effect. This is essentially to safeguard the loss of sugar in the condenser water. The Committee further feels that every individual mill should feel free to call upon any member of the Committee to discuss the details of installing a baffle.

3. The Committee also recommends that each Louisiana factory, when having completed its arrangements for preventing stream pollution at the factory, inform Chairman J. J. Munson of the over-all costs. The Committee is anxious to evaluate the efforts of the Louisiana sugar mills in correcting its stream pollution problems, in terms of dollars. It desires to be able to inform the Department in case it is found that a large sum has been spent in an effort to clear up the stream pollution problem, so that the Department may in turn know that the industry has made an earnest effort in its cooperation.

The Chair recognized a motion to adjourn.

Marcel J. Voorhies

By Way of Cooperation

The Louisiana Sugar Cane Producers' Association (an organization of sugar factories west of the Atchafalaya), at its meeting in New Iberia on May 1, 1941, decided to reorganize on a luncheon club basis.

The group is now organized under the name of Louisiana Sugar Producers Club (Western Division), with the following officers: Dr. Roy O. Young, President; Mr. G. L. Pace, Vice President; Mr. Marcel J. Voorhies, Secretary-Treasurer.

The Club is to meet on the first Friday of each month to discuss problems common to its members. It is not an association any more, and is cooperating fully with the American Sugar Cane League as the recognized industry organization of the Louisiana sugar industry.

With a very few exceptions, all of the members of the Louisiana Sugar Producers Club (Western Division) are active members of the American Sugar Cane League.

Handling Cane After Freeze

We are reprinting the Summary of studies "Windrowing and Storing of Sugarcane in Louisiana Following Injury by Freezing Temperatures" U. S. D. A. Technical Bulletin No. 736. Anyone interested in more details should write to the U. S. D. A. for this Bulletin:

Summary

The data presented here deal primarily with windrowing and storage experiments of cane of varieties Co. 281 and Co. 290 injured by freezing temperatures, and the discussion in the summary will be limited to these varieties.

Under the influence of mild freezing conditions the region of the sugarcane stalks first to be injured are in the spindle and at the tips of the leaves. As the conditions of freezing become more severe the injury extends downward killing the terminal buds, the eyes, and the stalk. The last of the eyes to remain sound are the lower ones.

The behavior of cane exhibiting different degrees of freezing injury when stored at different temperatures and relative humidities and when windrowed

was similar in respect to the occurrence of nonoccurrence of fermentive changes. Cane that showed no such changes in the windrow also showed none when stored at the different temperatures and relative humidities, whereas badly damaged cane showed fermentive changes under both sets of conditions.

The first signs of changes in acidity, pH value, and gum formation were found in the upper part of the sugarcane stalks. In cane severely injured these changes were greatest in the top third, next in the middle third, and least in the bottom third of the stalk after a period of time in the windrow or in storage.

The data reported indicate that so long as any eyes are sound at the time of windrowing, cane varieties Co. 281 and Co. 290 will windrow from 3 to 6 weeks under the usual weather conditions during the harvesting season in Louisiana without serious increase in acidity, decrease in pH value, and gum formation.

It has been found that in cane in which all the eyes, or all the eyes except an occasional basal eye, have been killed before windrowing, there may be a heavy consumption of solids at the expense of sucrose, although the developemnt of excess acidity and gum is slow. During the season of 1938-39 this heavy consumption of sucrose was associated with the fermentation involving the production of carbon dioxide and ethyl alcohol.

When all the eyes have been killed, the behavior of cane in the windrow or in storage seems to depend upon a degree of injury at present not measurable by physical symptoms. Cane showing a lesser degree of injury may keep for a period of weeks in the windrow without souring or gum formation, whereas cane showing a greater degree of injury rapidly develops these changes. Weather conditions following windrowing do not appear to be responsible for this difference.

It is possible that the storage of cane so injured at a high temperature (say, 80° F.) may determine promptly whether or not such critical condition of injury has been reached and whether such cane is fit for windrowing. Cane that has been critically injured will deteriorate rapidly whether standing or in the windrow.

The results relating to inversion of sucrose in frozen cane of the varieties Co. 281 and Co. 290 justify the same grouping as employed for unfrozen cane. Although certain lots of Co. 290 show high resistance to inversion, others show considerable susceptibility to it.

The data justify the conclusion that it is safer and wiser, when possible and practical, to windrow cane before it has been injured by freezing temperatures. They also justify the windrowing of cane damaged by freezing temperatures in which sound eyes are found as a protection against further injury.

CONFERENCE ROOM

THE AMERICAN SUGAR CANE LEAGUE
TAKES PLEASURE IN OFFERING A COMFORTABLE
PRIVATE CONFERENCE ROOM

to any of its members who may have occasion to use it. Business conferences in New Orleans may thus be held in a secluded and entirely neutral atmosphere, which is sometimes preferable to using the office of one of the conferring parties. No advance notice necessary. Just use the room at your convenience.

Prices from the Records of the Cane Products Trade Association, Inc.—1940-41 Season

Date	Willett & Gray	New York C.& S. Ex.	N.Orleans C.P.T. Ass'n.	Weekly Average	Blackstrap C.P.T. Ass'n.	Weekly Average
Oct. 11	2.78	1.88	2.78			
12	no market	-----	-----	-----	-----	-----
13	Sunday	-----	-----	-----	-----	-----
14	2.78	1.88	2.78	-----	-----	-----
15	2.78	1.88	2.78	-----	-----	-----
16	2.78	1.88	2.78	-----	-----	-----
17	2.78	1.88	2.78	2.78	-----	-----
18	2.77	1.88	2.78	-----	-----	-----
19	2.77	1.88	2.78	-----	-----	-----
20	Sunday	-----	-----	-----	-----	-----
21	2.80	1.90	2.80	-----	-----	-----
22	2.80	1.92	2.82	-----	5-7/8	-----
23	2.83	1.92	2.82	-----	5-7/8	-----
24	2.85	1.95	2.85	2.81	5-7/8	5-7/8
25	2.85	1.95	2.85	-----	5-7/8	-----
26	2.85	1.95	2.85	-----	5-7/8	-----
27	Sunday	-----	-----	-----	-----	-----
28	2.85	1.95	2.85	-----	6	-----
29	2.87	1.97	2.85	-----	6	-----
30	2.87	1.98	2.88	-----	6	-----
31	2.87	1.98	2.88	2.86	6	6
Nov. 1	2.89	1.98	2.88	-----	6	-----
2	2.89	1.98	2.88	-----	6	-----
3	Sunday	-----	-----	-----	-----	-----
4	2.89	1.98	2.88	-----	6	-----
5	no market	-----	-----	-----	-----	-----
6	2.90	2.00	2.90	-----	6	-----
7	2.90	2.00	2.90	2.89	6	6
8	2.90	2.00	2.90	-----	6	-----
9	2.90	2.00	2.90	-----	6	-----
10	Sunday	-----	-----	-----	-----	-----
11	no market	-----	-----	-----	-----	-----
12	2.90	2.00	2.90	-----	6	-----
13	2.90	2.01	2.91	-----	6	-----
14	2.90	2.00	2.90	2.90	6	6
15	2.90	2.00	2.90	-----	6	-----
16	2.90	2.00	2.90	-----	6	-----
17	Sunday	-----	-----	-----	-----	-----
18	2.90	2.00	2.90	-----	6	-----
19	2.90	2.00	2.90	-----	6¼	-----
20	2.85	1.97	2.87	-----	6¼	-----
21	no market	-----	-----	2.89	-----	6.1
22	2.85	1.95	2.85	-----	6¼	-----
23	2.85	1.95	2.85	-----	6¼	-----
24	Sunday	-----	-----	-----	-----	-----
25	2.85	1.95	2.85	-----	6¼	-----
26	2.85	1.95	2.85	-----	6¼	-----
27	2.85	1.95	2.85	-----	6¼	-----
28	2.85	1.95	2.85	2.85	6¼	6¼
29	2.85	1.95	2.85	-----	6¼	-----
30	2.85	1.95	2.85	-----	6¼	-----
Dec. 1	Sunday	-----	-----	-----	-----	-----
2	2.85	1.95	2.85	-----	6¼	-----
3	2.85	1.95	2.85	-----	6¼	-----
4	2.85	1.95	2.85	-----	6¼	-----
5	2.87	1.97	2.85	2.85	6¼	6¼
6	2.88	1.97	2.87	-----	6¼	-----
7	2.88	1.97	2.87	-----	6¼	-----
8	Sunday	-----	-----	-----	-----	-----
9	2.88	2.02	2.92	-----	6½	-----
10	2.93	2.03	2.93	-----	6½	-----
11	2.93	2.05	2.95	-----	6½	-----
12	2.95	2.05	2.95	2.915	6½	6¼
13	2.95	2.05	2.95	-----	6½	-----
14	2.93	2.05	2.95	-----	6½	-----
15	Sunday	-----	-----	-----	-----	-----
16	2.93	2.03	2.93	-----	6½	-----
17	2.93	2.03	2.93	-----	6½	-----
18	2.90	2.03	2.93	-----	6½	-----
19	2.93	2.03	2.93	2.94	6½	6¼
20	2.93	2.03	2.93	-----	6½	-----
21	2.93	2.03	2.93	-----	6½	-----
22	Sunday	-----	-----	-----	-----	-----
23	2.93	2.03	2.93	-----	6¼	-----
24	2.93	2.03	2.93	-----	6¼	-----
25	no market	-----	-----	-----	-----	-----
26	2.93	2.03	2.93	2.93	6½	6¼
27	2.93	2.03	2.93	-----	6½	-----
28	2.91	2.01	2.91	-----	6½	-----
29	Sunday	-----	-----	-----	-----	-----
30	2.90	2.00	2.90	-----	6¼	-----
31	2.90	2.00	2.90	-----	6¼	-----
Jan. 1	no market	-----	-----	-----	-----	-----
2	2.90	2.00	2.90	2.91	6½	6¼
3	2.90	2.00	2.90	-----	6½	-----
4	2.91	2.00	2.90	-----	6½	-----
5	Sunday	-----	-----	-----	-----	-----
6	2.91	2.01	2.91	-----	6½	-----
7	2.90	2.00	2.90	-----	6½	-----
8	2.92	2.03	2.93	-----	6½	-----
9	2.93	2.05	2.95	2.915	6½	6¼
10	2.93	2.05	2.95	-----	6½	-----
11	2.93	2.05	2.95	-----	6½	-----
12	Sunday	-----	-----	-----	-----	-----
13	2.93	2.05	2.95	-----	6½	-----
14	2.92½	2.04	2.94	-----	6½	-----
15	2.92½	2.04	2.94	-----	6½	-----
16	2.92½	2.04	2.94	2.945	6½	6¼
17	2.92½	2.02	2.92	-----	6½	-----
18	2.92	2.02	2.92	-----	6½	-----
19	Sunday	-----	-----	-----	-----	-----
20	2.92	2.03	2.93	-----	6½	-----
21	2.92	2.03	2.93	-----	6½	-----
22	2.93	2.03	2.93	-----	6½	-----
23	2.93	2.03	2.93	2.93	6½	6½

Prices from the Records of the Cane Products Trade Association, Inc.,—1940-41 Season—Continued

Date	Willett & Gray	New York C.& S. Ex.	N. Orleans C.P.T. Ass'n.	Weekly Average	Blackstrap C.P.T. Ass'n.	Weekly Average
Jan. 24	2.94	2.05	2.95	-----	6¾	-----
25	2.94	2.05	2.95	-----	6¾	-----
26	Sunday	-----	-----	-----	-----	-----
27	2.94	2.05	2.95	-----	6½	-----
28	2.97	2.07	2.97	-----	6½	-----
29	2.93½	2.04	2.94	-----	6½	-----
30	2.94	2.04	2.94	2.95	6½	6¼
31	2.95	2.05	2.95	-----	6¾	-----
Feb. 1	2.95	2.05	2.95	-----	6½	-----
2	Sunday	-----	-----	-----	-----	-----
3	2.95	2.05	2.95	-----	6½	-----
4	2.95	2.05	2.95	-----	6½	-----
5	2.94	2.04	2.94	-----	6½	-----
6	2.94½	2.04	2.94	2.95	6¾	6.59
7	2.94½	2.05	2.95	-----	6¾	-----
8	2.95	2.05	2.95	-----	6¾	-----
9	Sunday	-----	-----	-----	-----	-----
10	2.94	2.04	2.94	-----	6¾	-----
11	2.953	2.04	2.94	-----	6¾	-----
12	no market	-----	-----	-----	-----	-----
13	2.98	2.08	2.98	2.95	6¾	6¾
14	2.98	2.08	2.98	-----	6¾	-----
15	2.98	2.08	2.98	-----	6¾	-----
16	Suuday	-----	-----	-----	-----	-----
17	3.00	2.08	2.98	-----	6¾	-----
18	2.99	2.10	3.00	-----	6¾	-----
19	3.00	2.10	3.00	-----	6¾	-----
20	3.027	2.15	3.05	3.00	6¾	6¾
21	3.05	2.15	3.05	-----	6¾	-----
22	no market	-----	-----	-----	-----	-----
23	Sunday	-----	-----	-----	-----	-----
24	3.05	2.15	3.05	-----	6¾	-----
25	3.11	2.20	3.10	-----	6¾	-----
26	3.10	2.20	3.10	-----	6¾	-----
27	3.15	2.20	3.10	3.08	6¾	6¾
28	3.15	2.25	3.15	-----	6¾	-----
Mch. 1	3.15	2.25	3.15	-----	7	-----
2	Sunday	-----	-----	-----	-----	-----
3	3.15	2.25	3.15	-----	7	-----
4	3.15	2.25	3.15	-----	7	-----
5	3.15	2.25	3.15	-----	7	-----
6	3.15	2.25	3.15	3.15	7	6.96
7	3.20	2.30	3.20	-----	7	-----
8	3.20	2.30	3.20	-----	7	-----
9	Sunday	-----	-----	-----	-----	-----
10	3.20	2.30	3.20	-----	7	-----
11	3.20	2.30	3.20	-----	7	-----
12	3.25	2.35	3.25	-----	7	-----
13	3.28	2.37	3.27	3.22	7	7
14	3.30	2.40	3.30	-----	7	-----
15	3.30	2.40	3.30	-----	7	-----
16	Sunday	-----	-----	-----	-----	-----
17	3.33	2.42	3.32	-----	7	-----
18	3.35	2.45	3.35	-----	7	-----
19	3.34	2.45	3.35	-----	7	-----
20	3.34	2.44	3.34	3.33	7	7
21	3.32	2.44	3.34	-----	7	-----
22	3.32	2.44	3.34	-----	7	-----
23	Sunday	-----	-----	-----	-----	-----
24	3.427	2.55	3.45	-----	7	-----
25	3.45	2.55	3.45	-----	7	-----
26	3.45	2.55	3.45	-----	7	-----
27	3.45	2.50	3.40	3.405	7	7

Season's Average Price 2.972916
Price of Standard Cane per ton $2.785

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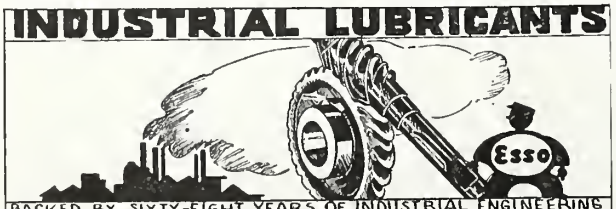

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against foreign Competition

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Watching the Trends

(By C. J. Bourg)

The procedure adopted by the Secretary of Agriculture in 1941, whereby the consumption of sugar in the United States has been estimated conservatively, is a definite and satisfactory improvement over the previous policy of making available to the market more sugar than anyone in the trade felt was needed. The estimate of consumption has been increased this year as necessity required, gradually and without drastic action. As a result, the price has advanced under reasonable control, and the prospects are that before very long the need will become evident for another increase in quota supplies. Of course, with rising consumption and an advancing price, the situation is bound to be conducive to a favorable reaction; but it is nevertheless the opinion of all informed observers that the present procedure is constructive and greatly preferable to a sudden suspension of quotas or estimates of consumption obviously above the requirements of the market. The domestic sugar industry is able to look forward to the future with more stability, when it has the assurance that unexpected and depressing action is unlikely. There are those whose interests, political or financial, are concerned with foreign sugar-producing areas who insist that there will eventually be a suspension of quotas in 1941. Our confidence that they are in error and are expressing a wish, rather than a logical conclusion, will continue as long as supply and demand in sugar are adjusted as carefully and progressively as they have been in 1941.

***

The prospects are that the price of sugar, and therefore the price of sugarcane, will be fairly good for the 1941 crop. However, there is no reason for Louisiana growers to expect that they will see a repetition of anything like the prices of the first World War period 1917-20. Although we find the situation tightening all the time, only an actual declaration of war by the United States in 1941 could disrupt the sugar market and cause abnormal prices during the current crop season. Moreover, the Government is developing a program of control over prices of all commodities to prevent inflation (OPACS), which control could easily extend to sugar if the quota system failed.

Reports from Cuba contain the interesting and significant information that England is buying considerable quantities of Cuban sugar. One report indicated purchases totaling over a quarter of a million tons in recent weeks. The Dominican Republic is reported to have sold its entire production for 1941, mostly to the British. Gradually the British will depend more upon the West Indies for sugar than has been the case in the past two years, during which sugar reserves in Britain have been depleted, and the shipments from the Western Hemisphere are now more likely to reach port than those from the tropics of the Pacific. British buying under the Lend-Lease Program is quite a different proposition from buying on the so-called "world market."

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The latest information is that five Japanese ships, which were intended or committed to carrying Philippine sugar to the United States, have been

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The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
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NOTICE

Executive Committee Meeting

The next meeting of the Executive Committee of the American Sugar Cane League of the U. S. A. Inc., will be held at 1:30 P.M., Wednesday, July 30, 1941, in the County Agricultural Building in Thibodaux.

All members of the American Sugar Cane League, and others interested in the welfare of the Louisiana sugar industry, are cordially invited to attend.

diverted by the Japanese Government to its own uses. From the standpoint of supplies of sugar to the United States in 1941, this development has less significance than the effect the Japanese action is likely to have upon the size of the Philippine deficit this year. It may have a great deal more significance with regard to 1942 and the future.

***

The Coffee Bill (H. R. 3582) is intended to protect the American consumers against any development whereby deficits in sugar shipments from the Philippines might become further involved in shipping difficulties from other foreign areas. For instance, in Peru on the Pacific side of the Panama Canal much nearer the eastern seaboard of the U. S. A., when the costs and hazards of shipping are weighted, than the Philippines? The domestic areas have surplus sugars (particularly in the beet area and in Puerto Rico) which can readily fill any Philippine deficit, even before the new-crop sugars from the mainland cane area and the best area come on the market. The House of Representatives has been devoting practically all of its time up to the end of the fiscal year on July 1st to the consideration of defense measures and appropriations for the Federal Government. The colossal tax measure is the next matter to be considered. The only progress on sugar matters has been that the Chairman of the Agriculture Committee has requested the Rules Committee to grant a hearing to determine whether the Coffee Bill should not be taken up under a special rule of the House.

***

The most recent statistics issued by the Department of Agriculture emphasize the increased movement of sugar. The entries of sugar from offshore areas under the quota system amounted to 3,428,551 tons during the first six months of 1941, which is over one million tons greater than the corresponding period in 1940, and well above the average of the first six-months' period of the years under the Sugar Act, as shown by the following :

	1941	1940	1939	1938	1937
Cuba	1,571,489	1,002,694	579,603	983,430	1,396,409
Philippines	639,042	474,721	540,829	651,691	644,438
Puerto Rico	667,940	531,587	688,301	619,454	751,351
Hawaii	492,564	381,073	433,461	389,204	479,369
Virgin Islands	1,764	0	0	1,021	3,551
Other Foreign	55,752	5,982	10,885	17,688	15,232
Total	3,428,551	2,396,057	2,253,079	2,662,488	3,190,350

These entries from offshore areas should not be confused with the distribution of sugar for consumption. According to the latest sugar statistics released by the Department of Agriculture, the distribution for consumption amounted to 3,285,668 tons for the first five months of the year, which is 825,000 tons greater than the first five months of 1940. The trends of increased offshore entries are to some extent related to the trends in the distribution for consumption; but the distribution figures are necessarily the more significant, because they indicate that even the latest estimate of the Secretary of Agriculture of 7,125,000 tons will not be adequate to fill the total requirements of United States consumers for 1941.

Safeguarding the Sugar Supply

(Excerpts from a radio address by Fred Brenckman, Washington Representative, The National Grange, over stations of the National Broadcasting Co., on the Grange Hour, from Washington, D. C., June 21, 1941)

Congress is at present considering legislation to amend the Sugar Act of 1937. Under this Act quotas are allocated to domestic producers of sugar cane and sugar beets. Quotas are likewise fixed for our Island possessions, as well as Cuba. About 30 per cent of our domestic consumption of sugar is allocated to the continental producers of sugar beets and sugar cane; 42 per cent goes to Hawaii, Puerto Rico, the Philippines and the Virgin Islands, while Cuba gets the remaining 28 per cent, including the very small amount that is allocated to other foreign countries.

America leads the world in the consumption of sugar. Our domestic consumption amounts to more than 6,500,000 tons a year, which is at the rate of more than 100 pounds for each man, woman and child in the country.

Under the provisions of the Philippine Independence Act, the duty-free quota of the Islands for the present year is fixed at 982,000 tons. However, because of the growing scarcity of shipping and a tremendous increase in ocean-freight rates the Philippines will not be able to fill their quota this year.

Shipping And Insurance Rates Soar

As an example of the way the freight rates have soared, before the war the cost of shipping a ton of sugar from the Philippines to the United States was $6.75. Today the rate ranges from $25 to $35 a ton. This does not take into account the rise in insurance rates, which are also heavy.

Under the Sugar Act of 1937, the Secretary of Agriculture is directed to pro-rate any deficit in the Philippine quota to foreign countries other than Cuba. In pursuance of its Good Neighbor Policy, the Administration has been very anxious to allot to certain South American countries that portion of the Philippine quota which the Islands cannot fill under present conditions.

By a vote of 45 to 26, the United States Senate early this month passed the Adams-O'Mahoney Bill, S. 937, directing the Secretary of Agriculture to prorate to foreign countries other than Cuba 75,000 tons of the allotment which the Philippines cannot fill this year. The remainder of the unfilled quota of the Philippines, if any, is to be equitably apportioned among domestic producers.

Secretary of State Hull voices strong objections to the Adams-O'Mahoney Bill. He alleges that its enactment "would repudiate the policy of hemisphere defense and the economic cooperation which the American Republic agreed upon at the Havana Conference less than a year ago."

The fact is, however, that the 75,000 tons allocated to foreign countries other than Cuba is about three times the allotment to which these countries are entitled under the present Act.

There can be no doubt whatsoever that the advocates of the Adams-O'Mahoney Act are on the right track in maintaining that it is not in the interest of national defense to put an unnecessary strain upon shipping facilities by bringing more sugar from such countries as Peru and San Domingo, which lies east of Cuba, when we have in the United States huge surplus stocks of beet sugar which cannot be sold at present because they are in excess of marketing quotas.

Coffee Bill Placed On House Calendar

The House Committee on Agriculture has favorably reported HR 3582, introduced by Congressman Harry B. Coffee of Nebraska, bearing on this question.

The Coffee Bill is directly and fully responsive to the request which had originally been made in 1937 by Secretary Hull on behalf of the Dominican Republic, Peru and other South American countries. As the report of the Committee shows, the Secretary of State and the Secretary of Agriculture in 1937 requested that the deficit of dutiable sugar from the Philippines be transferred to foreign countries. At no time was it stated or understood that foreign countries were promised that they would be given any part of the duty-free quota of the Philippines.

It is impossible, therefore, to justify any claim that the adoption of Congressman Coffee's Bill would be a repudiation of a promise. In fact, the Coffee Bill pays scrupulous regard to the Good Neighbor Policy. The Good Neighbor Policy is a worthy concept; but just like any other good thing, there are definite limits beyond which the United States Government cannot go without trampling on the rights of American producers.

Most of the opposition to the Adams-O'Mahoney Bill, which has already passed the Senate, and to the bill by Congressman Coffee comes from the eastern seaboard, where most of our cane sugar refineries are located. The eastern seaboard refineries base their opposition on the prospect that any increase in the quota of the beet sugar areas would reduce cane refinery operations. This manifestation of local patriotism is disappointing and unfortunate, coming at a time when unity in the national defense emergency is so essential.

There are 17 cane sugar refineries in the United States, of which four are in New York. Let us assume that these four would benefit by giving to foreign countries a larger share of the sugar market of the United States. Louisiana has six refineries and they handle the crop of that State, as well as some of the sugars of Puerto Rico and Cuba.

Under the Coffee Bill, the sugar producers of Louisiana and Puerto Rico would furnish their share of the Philippine deficit and in the event of a still further deficit in domestic areas Cuba could furnish its share.

Surplus of Domestic Beet Sugar

As I have said, domestic areas have a surplus of sugar which cannot be sold because it was in excess of the marketing quotas. The domestic sugar beet industry on January 1, 1941, had on hand inventories of 1,754,000 tons. Its quota for 1941 is 1,589,000 tons. This means that more than 165,000 tons of beet sugar from the 1941 crop must be carried over until 1942, in addition to the full production of the 1941 sugar beet crop.

The industry usually markets about 350,000 tons of beet sugar from the current crop during the last few months of each year. The existing surplus of beet sugar amounts to more than 500,000 tons. This was produced in direct compliance with the Sugar Act

and has protected consumers against excessive prices.

Because of this surplus, the acreage planted to sugar beets in the United States has been reduced more than 16 per cent in conformity with the Sugar Act. Various beet sugar factories throughout the country have been forced to close down because of this reduction in acreage.

If domestic areas are enabled to market some of their excess sugar this year, increased acreage allotments to domestic growers may be available next year. This would reopen some of the closed factories and relieve unemployment.

It should be understood that the Sugar Act and the quotas which it provides was designed to protect the domestic sugar industry as well as consumers. Without any restrictions on imports, the domestic sugar beet industry would probably have been driven out of existence. Under present conditions, the beet sugar industry is in a position to protect domestic consumers against price gouging and scarcity, if it is simply permitted to function.

It is argued with good reason that under existing abnormal conditions this country ought to emancipate itself so far as possible from dependence on seaborne sugars, for access to that sugar is rendered precarious by lack of ships, and the need to divert all the ships possible to aid Great Britain in the Battle of the Atlantic.

If shipping space is scarce this year, it is easily conceivable that it may be still more scarce next year. If we fail to take advantage of the opportunity to expand sugar production at home, there may be a repetition of the conditions that existed in the United States during the first World War, when sugar was retailed at from 30 to 35 cents a pound, and when families were strictly rationed in the bargain.

As I have already indicated, only 30 per cent of the sugar we consume is produced in the continental portion of the United States. Under existing conditions, we would be fully justified in producing 40 per cent of our sugar at home.

Chemical Composition of Sugarcane Juice As Affected By Fertilizers

We are reprinting the Summary of a study "Chemical Composition of Sugarcane Juice as Affected by Fertilizers" U. S. D. A. Technical Bulletin No. 754, April 1941. Anyone interested in further details should secure the Bulletin from the United States Department of Agriculture:

Summary

Sugarcane used in these experiments was grown on and harvested from replicated plots in experiments located on several of the principal soil types of the Louisiana sugarcane district during the 1931, 1932, and 1933 harvest seasons. The cultivation and harvesting operations were similar to local commercial practices. Representative sample of millable cane from each plot were crushed in a hydraulically equipped mill. The crusher juice thus obtained was closely comparable with that obtained by the double crusher and first mill of a commercial factory. Samples of the fresh juice from the replicate plots at each location were composited and after removal of soil particles, bagacillo, and other adventitious matter by a standarized procedure the juice was analyzed for total solids, sucrose, purity, reducing sugars, acidity, pH value, carbonate ash, salica, prosphate, sulfate, chloride, potassium, sodium, calcium, magnesium, total nitrogen, protein nitrogen, and ammonia and nitrate nitrogen to determine the influence of fertilizer on these components.

The fertilizer managements may be conveniently grouped into 3 classes; (1) Fertilizer-ratio studies according to the triangle system, in which sodium nitrate, superphosphate, and potassium chloride were used singly and in 18 different mixtures each equivalent to an application of 60 pound of total food per acre: (2) rate of application studies, in which 6 representative ratios of fertilizer were applied at rates of 200, 400, 600, and 800 pounds equivalent to 40, 80 120, and 160 pounds of total available plant food per acre: and (3) source of nitrogen studies, in which equivalent applications of ammonium sulfate, calcium, cyanamide, Calnitro, Calurea, cottonseed meal, and sodium nitrate were compared. Unfertilized plots at each location served as a basis of comparison.

Compared with analyses of juice from unfertilized sugarcane, fertilization with sodium nitrate generally caused a decrease in the total solids, sucrose, purity, acidity, pH value, ash, phosphate, sulfate, chloride, potash, sodium, and probably the manganese content of the juice and juice solids and an increase in the nonsucrose solids, reducing sugars, calcium, total nitrogen, protein nitrogen, nonprotein nitrogen, and proportion of nonprotein nitrogen (table 19). No measurable effect was noted on the silica, ammonia, or nitrate nitrogen content of the juice. The effect on the magnesium content of the juice and juice solids was uncertain. Sodium nitrate decreased the sulfate, chloride, sodium, and probably the phosphate content of the carbonate ash of the crusher juice, and increased the calcium, magnesium, silica, and probably the managanese.

Fertilization with superphosphate increased the ash content of the juice and juice solids, apparently by causing a large increase in the sulfate concentration. This material also increased the potash content of juice slightly and probably increased the manganese. It did not significantly change the total solids, sucrose, purity, nonsucrose solids, reducing sugars, total nitrogen, protein nitrogen, pH value silica, phosphate, or chloride, but decreased the acidity, and possibly the calcium and magnesium content of the juice and juice solids of the samples analyzed. It increased the sulfate, caused no change in the silica and chloride, decreased the phosphate potash, sodium, and calcium, and appeared to decrease the magnesium content of the ash.

Application of potassium chloride as fertilizer increased the total solids, sucrose, purity, pH value, ash, chloride, potash, and manganese in the juice and juice solids, and the chloride and potash content of the juice ash compared with the amounts present in similar but unfertilized samples. This fertilizer did not influence the total nitrogen, protein, nitrogen, nonprotein, silica, or sulfate content of the juice and juice solids, nor the sulfate content of the ash. It decreased the nonsucrose solids, reducing sugars, acidity, sodium, and possibly the magnesium content of the juice and juice solids, also the proportion of silica. phosphate, sodium, calcium, and magnesium in

the ash. The effect on the manganese content of the ash was indefinite.

The magnitude of the above effects was generally directly related to the quantity of each of the plant foods used. This was especially true of the organic-nitrogen fractions, total nitrogen, phosphate, and potash in the juice where apparently only one fertilizer component caused the effect. In cases where two or more plant foods exerted each a definite effect on a constituent, the resultant effect of their use in mixtures was a summation of the two separate effects and was related to the concentration of each in the mixtures; for example, the sulfate, chloride, reducing sugar, and ash relationships. The avaliable data indicate that potash is the plant food most closely associated with increase in sucrose content, but that the maximum increase occurred when it was supplemented with a small quantity of both nitrogen and phosphate. As sucrose is the principal solid substance in sugarcane juice, the above effect was also reflected in the total solids data but not in the juice purity.

Application of large quantities of fertilizer appeared to accentuate any specific influences observed when smaller quantities were used, but the changes were asymptotic rather than proportional to the increased rate of application. Very large amounts of nitrogen not only greatly increased the total nitrogen content but also increased the ratio of nonprotein to protein nitrogen and the ammonia and nitrate nitrogen in the juice. In no case, however, were these inorganic forms of nitrogen present in such quantity that they would have measurable effect on sugarhouse operations.

Comparisons of several common nitrogen fertilizers showed that all act in the same manner but to a different degree with respect to their influence on certain juice components but have specific action on other components (table 20). Ammonium sulfate decreased the acidity, phosphate, and chloride of the juice and juice solids, the proportion of phosphate, chloride, and possibly potash in the ash, and seemed to reduce the total solids and sucrose of the juice more than any of the other nitrogen fertilizers investigated. It decreased the ash content of the juice in a manner comparable with the other nitrogen fertilizers when used in the western part of the Louisiana sugarcane district but apparently increased the ash content in the eastern experiments. It caused the greatest increase in calcium and protein nitrogen, particular the alcohol-insoluble "protein", and was the only nitrogen fertilizer that caused a general

TABLE 19.—Summary of date on effect of fertilization on composition of crusher juice from certain varieties of sugarcane grown in Louisiana, in comparison with that from unfertilized sugarcane[1]

BRIX-SOLIDS OR JUICE BASIS

Fertilizer	Total solids[2]	Sucrose[2]	Purity	Non-Sucrose solids	Reducing sugars	Total Nitrogen	Protein Nitrogen	Non-protein Nitrogen	Acidity	pH
Nitrogen	–	–	–	†	††	††	††	††	–	–
Phosphoric Acid	0	0	0	0	0	0	0	0	–	0
Potash	†	†	†	–	– –	0	0	0	–	†

	Ash	SiO_2	P_2O_5	SO_4	Cl	K_2O	Na_2O	CaO	MgO	MnO
Nitrogen	–	0	–	– –	0	–	– –	†	†?	–
Phosphoric Acid	†	0	0	††	0	†?	– –	–?	–?	†
Potash	†	0	†	0	††	††	– –	–?	0?	†

ASH BASIS

Fertilizer	SiO_2	P_2O_5	SO_4	Cl	K_2O	Na_2O	CaO	MgO	MnO
Nitrogen	†	–?	– –	0	?	– –	††	†	†?
Phosphoric Acid	0	–	†	0	–	– –	–	–?	?
Potash	–	–	0	††	††	– –	–	–	?

[1] Changes in composition of juice as effects of fertilization are indicated as follows: ††, marked increase; † increase; ? doubtful; 0, no effect; –, decrease; – –, marked decrease.

[2] Maximum value observed in complete mixture high in potash and low in nitrogen and phosphoric acid.

TABLE 20.—Effect of various kind of nitrogen fertilizers on chemical composition of crusher juice from certain varieties of sugarcane grown in Louisiana, in comparison with that from unfertilized sugarcane.[1]

BRIX-SOLIDS OR JUICE BASIS

Fertilizer	Total solids	Sucrose	Purity	Non-Sucrose solids	Reducing sugars	Total nitrogen	Protein nitrogen	Non-protein nitrogen	Ammonium nitrogen	Nitrate nitrogen
Ammonium sulfate	–	– –	– –	††	††	††a	††	†	†	0
Calcium cyanamide	–	–	–	†	– –	††b	††	†	†?	0
Calnitro	–	–	– –	††	----------	††b	††	†	----------	----------
Calurea	–	– –	– –	††	----------	††a	††	†	----------	----------
Cottonseed meal	?	?	?	?	†	†	†	†	----------	----------
Sodium nitrate	–?	–	– –	††	†	††b	††	†	–?	0

Fertilizer	Acidity	pH	Ash	SiO_2	P_2O_5	SO_3	Cl	K_2O	CaO	MgO	MnO
Ammonium sulfate	– –a	– –	–?	0	– –a	††	–	–	†	†	–
Calcium cyanamide	– –b	– –	– –	0	– –c	– –	–	–	†	–	–
Calnitro	– –c	–	–	†?	– –b	– –	–	–	†	?	–
Calurea	– –b	– –	–	†?	– –b	– –	–	–	†	?	–
Cottonseed meal	----------	----------	–	–?	----------	----------	–	----------	----------	----------	----------
Sodium nitrate	– –c	–	– –	–?	– –c	– –	–	–	†	?	–

ASH BASIS

Fertilizer	SiO	P_2O_5	SO_4	Cl	K_2O	CaO	MgO	MnO
Ammonium sulfate	†	– –	††	– –	–?	††	††	†
Calcium cyanamide	††b	0	– –	–	†?	†	†	†?
Calnitro	††a	–	– –	–?	–?	†	†	†?
Calurea	††a	–	– –	–	–?	†	†	†?
Cottonseed Meal	††a	----------	----------	–	----------	----------	----------	----------
Sodium nitrate	††b	0	– –	–	†?	†	†	†?

[1] Changes in composition of juice as effects of fertilization are indicated as follows: ††, Marked increase; †, increase; ?, doubtful; 0, no effect; –, decrease; – –, marked decrease; subscripts a, b, c, indicate material acting similarly, a being the group causing the greatest change, b the nest in magnitude of effect, and c the least.

increase in the sulfate and magnesium content of the juice and juice solids above that in samples from unfertilized sugarcane. Ammonium sulfate was the only nitrogenous material that increased the proportion of sulfate in the ash. It increased the proportion of calcium and magnesium and reduced the proportion of silica in the ash more than the other materials.

The action of Calurea was similar in many ways to that of ammonium sulfate, being essentially equal or second to the latter in its effects on the total solids, sucrose, purity, nonsucrose solids, total nitrogen, protein, nitrogen, percent of protein nitrogen in the total nitrogen, pH value, and ash.

Calnitro, sodium nitrate, and calcium cyanamide were not extreme in their effects that the two first-named caused the greatest decrease in the ash content and smallest decrease in the phosphate content of the juice and juice solids. The former decreased the phosphate content of the ash in a manner comparable to Calurea; the latter caused a somewhat higher reducing-sugar content than the other materials except ammonium sulfate and the lowest content of magnesium in the ash.

Cottonseed meal had the least influence on juice composition of any of the nitrogen fertilizers studied. It differed from the other nitrogen carriers in apparently causing no change in total solids, sucrose, purity, and nonsucrose solids, and comparatively little increase in reducing sugars and the various organic nitrogen fractions.

Ammonium phosphate increased the yields of cane without aparently causing much change in the composition of the juice compared with that of unfertilized samples.

The specific effects of fertilizer ratio, rate of application, and source of nitrogen varied among the different soil types. In general, fertilization caused a greater change in the composition of the juice on the soils of the western than of the eastern part of the Louisiana sugarcane district. The effects were pronounced on the Louisiana silt loam and definite on the Yahola very fine sandy loam, Iberia silt loam, and Yazoo very fine sandy loam. The general effects of fertilizer on the Franklin silt loam were in qualitative agreement with the general trends except that sodium nitrate appeared to have little if any influence in decreasing the total solids and sucrose, and it decreased the calcium content of the juice and increased the proportion of potash in the ash. The effects of fertilization were generally least on the Sharkey silty clay and were exceptional in that the influence of nitrogen of sucrose, purity, and ash was doubtful; sodium nitrate appeared to increase the amount of chlorides present, and all fertilizers increased the proportion of protein nitrogen in the juice compared with values observed for unfertilized samples.

Trichogramma Experiments

By request, we are reprinting the (Summary and Conclusions) of a recent study—Experiments with Trichogramma Minutum Riley as a Control of the Sugarcane Borer in Louisiana—U. S. D. A. Technical Bulletin No. 743, January 1941. Anyone interested in more detailed information should write to the U. S. D. A. for a copy of this Bulletin:

Summary and Conclusions

Experiments were conducted for three seasons to ascertain whether or not the sugarcane borer (Diatrea Saccharalis (F.) could be controlled in Louisiana by mass liberations of Trichogramma Minutum Riley.

Several lots of bagworm eggs were placed in the fields during the winter and early part of spring, but no parasitization by Trichogramma was obtained. A Trichogramma adult, however, was collected in the winter and several species of moths were found depositing eggs at this time which could serve as hosts.

Experiments conducted in April 1934 showed that Trichogramma disperse as far as 100 feet within 48 hours after release.

It was apparent from a comparison of the numbers of joints bored externally an internally that the count of joints bored externally can be used as a reliable indication of the actual internal borer injury.

A definite correlation is shown between the percentage of parasitization and host density. A study of egg collections and of the correlation between parasitization and host density indicates that very little reliability can be placed on the increase of parasitization prior to August as an indicator of sugarcane borer control.

Every precaution was taken to see that the plots selected for the experiments on the control of the borer by the mass liberation of Trichogramma were uniform in every respect. Each experiment consisted of a colonized and a check area which were separated by a buffer area in 1934 and 1935 and in most cases in 1933. Parasites were released at the rate of from 10,000 to 45,000 per acre during the 3 seasons.

In comparing the progress of parasitization of the borer egg cluster found throughout the three seasons, very little difference was observed between the percentages of parasitization in the colonized, buffer, and check plots.

A study of the infestation in the stalks and joints showed that the borer infestation in the joints in which Trichogramma parasites were released increased to as great an extent as in the check plots.

Factory analyses for sugar content and the net weight of all the cane harvested from each plot was used to obtain the amount of sugar and cane produced per acre in the various plots. No relationship was evident between Trichogramma releases and increased yields; yet such a relationship certainly should have appeared, in the large number of experiment conducted, had this practice resulted in any significant increase in yield.

In some experiments the difference in yields between the two or three cuts composing the colonized plot was greater than that between the average of the colonized and the average of the check cuts of the same experiment. There was also considerable variation in the pounds of sugar per ton of cane resulting from tests made on various carload lots of cane from the same cut. These differences indicate the great variation in yields that occurs in the average cut of sugarcane.

Thus, the results of the experiments conducted during the three seasons show that releases of Trichogramma Minutum are of no value in the control of the sugarcane borer in Louisiana. The colonization of Trichogramma as a field practice for the con-

trol of the sugarcane borer is therefore not recommended.

Editor's Note: In the May 15, 1941, issue of The Sugar Bulletin, we printed excerpts from the Annual Report of County Agent P. J. deGravelles, of St. Mary Parish. The sugar cane farmers of St. Mary Parish have been using Trichogramma in their borer control efforts since 1932.

They have used them constantly for ten years, keeping systematic counts of damage and are convinced that the method is practical and efficient.

Fair Price and Wage Rate Hearings

The Sugar Division of the Agricultural Adjustment Administration conducted public hearings to afford the producers of sugar cane for sugar an opportunity to be heard, and to supply information to the Secretary of Agriculture to be used in determining fair and reasonable prices to be paid for sugar cane, and for wages to be paid in the sugar industry.

The hearings were held as follows: June 20, 1941, Clewiston, Florida, Clewiston High School Auditorium; June 23, 1941, New Orleans, Louisiana, Association of Commerce Building; June 25, 1941, New Iberia, Louisiana, New Court House; June 27, 1941, Donaldsonville, Louisiana, Court House.

The Louisiana sugar industry representations were made by the Grower-Processor Committee. The Grower-Processor Committee is composed of seven growers of sugar cane for sugar selected at a State-wide meeting of sugar cane producers, and seven processors selected at a meeting of all the processors in the State.

Mr. W. F. Giles, Vice Chairman and a grower member of the Grower-Processor Committee, appeared at the New Orleans hearing as a witness for the Grower-Processor Committee with respect to fair and reasonable prices to be paid for sugar cane for sugar. He recommended that the purchase contract of last year be continued for this year.

Mr. J. J. Shaffer, Jr., a grower member of the Grower-Processor Committee, appeared as a witness for the Grower-Processor Committee at the Donaldsonville hearing with respect to fair wages.

It is rather significant that no laborers or labor organization made official representations at any of the three hearings held in Louisiana. It must be assumed that the labor and wage conditions of the Louisiana sugar industry are satisfactory to labor.

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Washington Notes

(By C. J. Bourg)

When the Secretary of Agriculture increased the consumption estimate by 502,000 tons a few days ago, it was expected that the price of sugar would be depressed; but the opposite has happened, and everybody wants to know, "why?" The Department of Agriculture, through its Bureau of Agricultural Economics estimated a short time ago that the sugar supplies available to the United States market in 1941 amount to 8,900,000 tons. No matter how we attempt to set up the figures, it seems impossible to justify any available supply of sugar greater than 8,000,000 tons, if we accept the necessity for maintaining the normal stocks of sugar from year to year. With the Secretary of Agriculture estimating that consumers will require 7,627,563 tons and with the market advancing after this estimate was made, there must be a question undoubtedly in the minds of buyers and sellers of sugar whether the 1942 statistical picture is very reassuring.

* * * *

The factors which are assuming major importance and may be controlling next year are admittedly not normal. With the Japanese movements on the Pacific, who can guarantee that any additional Philippine sugar will be available to the United States for a long time, possibly several years? How much of the Hawaiian quota in 1941 and in the future can be received in Pacific ports, in view of the probability that there will be no coastwise shipping to the Atlantic seaboard and that the cost of railroad transportation across the continent would be too costly, if rolling stock were available? There is at least doubt that the Maritime Commission will sanction large shipments of sugar from Peru, when ships are needed to bring copper from the same region in South America. A new consideration, but a very real one, is linked with the increasing dependence of England upon the West Indies for sugar. By 1942 many expect that the Western Hemisphere will have to supply whatever sugar the British do not produce at home. Evidently, the sugar market thinks along these lines, if we may judge by the gaining strength of the so-called "world sugars." Last year, the price was nominal and depressed below cost of production; currently, there is more activity in world sugars than in domestic sugars, which means that somebody expects England to buy a lot of sugar from now on. Therefore, there should be need for increased production of sugar in Louisiana, as well as other domestic areas.

* * * *

The House Rules Committee has been holding sporadic hearings on the Coffee Bill (H.R. 3582) in connection with the Philippine deficit, but most of the time has been taken up in the general discussion of the sugar program. Congressmen from several of the beet States have testified, and others from the beet and cane States have requested to be heard. At this writing, although Congressmen Boggs of the 2nd District, Domengeaux of the 3d District, Sanders of the 6th District and Plauche of the 7th District attended and were ready to testify, Congressman Leonard Allen of the 8th District is the only member from Louisiana who has been called, and he stressed the substance of the present contest by stating that Congress must decide whether the Philippine deficit is going to be filled by our own producers at home, who pay the taxes and help sustain the nataional welfare, or will be handed to foreigners who are already being allowed to market more sugar in the United States this year than ever before in history.

* * * *

Congressman Hale Boggs of Louisiana presented one of the most complete discussions of national sugar

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Marcel J. Voorhies, Editor

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REVISED QUOTAS

The AAA increased and reallocated quotas after the close of the markets on July 30th. We print the old and new allotments below in tons of 2,000 lbs. raw value:

	Former Quota	New Quota
Domestic Beets	1,768,996	1,925,499
Domestic Cane	479,562	445,000
Hawaii	1,070,641	993,522
Puerto Rico	910,787	991,365
Philippines	1,060,023	982,663
Cuba	2,181,825	2,374,852
Virgin Islands	10,176	11,076
Foreign Full Duty	145,553	282,859
Total	7,627,563	8,006,836

policy ever heard in the House of Representatives. Congressman Boggs' complete address cannot be published in full because of lack of space; but the following discussion of international relations is presented, as it was the highlight of his address:

"As is always the case with a government policy which is founded upon idealism, there are predatory interests which seek to exploit other countries and other people under the guise of sustaining the ideal of international good will. It serves no good purpose for Congress or the American people to shut their eyes to the fact that American international bankers and financiers have done more to create ill will for the United States among other nations than to secure international friendships. There is no secret about the feeling of the Cuban natives in connection with the practices of Americal financial lords. There have been many demonstrations in Habana which could not be submerged. These movements have been termed revolutionary and more recently have been blamed on "fifth columnists;" but we can be realistic about the whole business, when we examine the scale of wages paid to laborers in Cuba and the payments made to the native farmers of Cuba for sugarcane. In recent years this shameful exploitation of natives has been partially remedied by laws passed in the Congress of Cuba, but the enforcement of these laws has been notoriously comparable to the enforcement of prohibition regulations in some of our great metropolitan centers. That condition has aggravated an already bad situation. The case of Cuba is not an isolated one. The recent oil troubles in Mexico can be traced to the same practices of international financiers.

"The good-neighbor policy is now accepted and supported by the vast majority of the American people, and I agree with its purposes and objectives; nevertheless, there are always reasonable limits within which international policies must be kept, in order to avoid having them transgress upon accepted and meritorious domestic policies. I believe as much in the principle of developing the domestic market for our producers as I do in the principle of the good-neighbor policy. I likewise believe that both principles can be put into practice by the Federal Government, with benefits for all. But the normal progress and expansion of an American industry, and particularly an agricultural industry, should never be subordinated to an international policy which has the effect of favoring foreign producers as against our producers at home. We are not permitted to produce more than 30 per cent of the sugar consumed in the United States. With idle acres and idle men, capable and willing and anxious to produce sugar in the continental United States, it is sound public policy for the United States Government to encourage that production.

"But the success of the good-neighbor policy cannot be achieved or assured by granting further favors and greater advantages to American exploiters of foreign laborers and farmers. Our good-neighbor policy can only succeed if the United States insists upon the benefits reaching down into the native masses of our neighbor countries, which we are supposed to assist. Our domestic sugar producer are just as patriotic Americans as any other citizens of the United States, and they fully ap-

preciate the advantages of Western Hemisphere solidarity; but, in my conversations with them, I can see that they are fully justified in objecting to the expansion of benefits and international subsidies which flow in great volume into pan-American countries, but in too many cases only driblets reach the natives of those countries and the main stream is diverted back into the coffers of American corporations and the banks of New York. This procedure does not obtain confidence and good will, but acts as a boomerang to create suspicions and hatred by placing a dollar sign in the minds of the unfortunate natives, who hear of benefits but are denied participation.

"Mr. Speaker, I repeat that I favor the good-neighbor policy, but there are two objections which I offer with the sincere hope that they may be corrected: First, the expected benefits which are to flow from the good-neighbor policy will be enjoyed by all citizens of the United States, and it is manifestly unfair that the carrying out of the good-neighbor policy should place the burdens of that policy upon the backs of a single industry of the United States, like the sugar industry, or upon the backs of agriculture exclusively. Second, the control which the United States can exert over the expenditure of funds and the granting of favors to foreign countries has not been applied to make sure that the direct benefit of our contribution reaches the natives and the masses of the beneficiary countries. We are acting as a nation in the carrying out of the good-neighbor policy; and, as far as is practicable, it must be the purpose of our Government to have all citizens bear equally whatever burdens are involved, just as they enjoy equally the benefits of international good will. If cordial relations are desired with Cuba, let that be brought about by concessions on the part of the Nation as a whole, not concessions exclusively yielded at the expense of the domestic sugar industry. If it is the good will of the Cuban people we desire, then let us cultivate that good will by forcing the extension of the advantages to the laborers, farmers, and the natives of Cuba, instead of diverting the major part into the banks of New York City and the corporations of Wall Street."

Cuban Trade Agreement May Be Re-Opened

The United States Department of State has issued a formal notice of intention to supplement the Trade Agreement with the Government of Cuba. A public hearing will be held in Washington on September 8, 1941, before the Committee for Reciprocity Information. However briefs must be submitted to the Committee not later than noon of August 23, 1941.

Among the articles listed for discussion in connection with a possible change in tariff rates or other provisions affecting such rates, are sugars and syrups covered by Paragraph 501 of the U. S. Tariff Act of 1930, also molasses not imported to be commercially used for the extraction of sugar or for human consumption, as listed in Paragraph 502 of the Tariff Act.

Under the procedure followed by the Committee for Reciprocity Information the State Department gives no indication of its intentions regarding changes, but leaves the entire question of possible changes to be proposed or opposed, open for discussion by the industry affected or the persons appearing at the public hearing. So far, there have been no informal suggestions made as to the intentions of the State Department or the reasons for negotiating a Supplemental Trade Agreement with Cuba at this time.

Increased Sugar Supplies Made Available By U. S. D. A.

Washington, D. C., July 19, 1941

The Department of Agriculture today announced an increase in the quantity of sugar made available to meet consumers' requirements for the calendar year from the 7,125,561 short tons, raw value, announced June 9, 1941, to 7,627,563 tons an increase of 502,002 tons.

The quotas for the various sugar producing areas under the revised figure compare with the former quotas as follows:

	Present Determination	Determination of June 9, 1941
Domestic Areas		
Continental Beet	1,768,996	1,652,571
Mainland Cane (Louisiana & Florida)	479,562	448,000
Hawaii	1,070,641	1,000,177
Puerto Rico	910,787	850,844
Virgin Islands	10,176	9,507
Under U. S. Sovereignty		
Commonwealth of the Philippine Islands	1,060,023[1]	982,663[2]
Foreign Areas		
Cuba	2,181,825	2,038,230
Foreign countries other than Cuba	145,553[3]	143,569
	7,627,563	7,125,561

1. Quota of 1,175,428 tons less 115,405 tons reallotted to foreign countries other than Cuba since January 1, 1941.
2. Quota of 1,098,068 tons less 115,405 tons reallotted to foreign countries other than Cuba since January 1, 1941.
3. Base quota of 30,148 tons plus 115,405 tons reallotted from Philippine quota since January 1, 1941.

The Sugar Division of the Agricultural Adjustment Administration stated that with respect to the Philippines, approximately 717,000 tons of the Commonwealth's sugar quota had entered the country by July 18, and that an additional quantity was on its way to the United States. Officials asserted however, that should any part of the balance of the Philippine quota not be available, the deficit can be reallotted to nearby areas. Such reallotments could also be made in the case of any other area unable to fill its entire quota.

The Sugar Act of 1937 directs the Secretary to make an initial determination of consumers' sugar requirements in December for the following calendar year, and to make any necessary adjustments during the year. The present estimate of 7,627,563 tons compares with the 7,465,633 tons marketed in 1939, in the fall of which year the sugar quota system was suspended by presidential proclamation and a distribution for consumption of about 6,890,000 tons in 1939 and 1940.

The present increase is in accordance with the sugar policy announced by the Department on June 21, 1941, when it was stated that if buyers and consumers wish to carry larger working stocks than in prior years, it would be the Department's policy to increase quota supplies accordingly.

USDA Lists Sugar Deliveries for First Six Months of '41

Washington, D. C., July 18, 1941

The Department of Agriculture today issued its preliminary statement of deliveries of direct-consumption sugar by manufacturers and importers of sugar during the month of June, based on telegraphic reports from the companies. The Department also announced stocks held by refiners on June 30. Full details on stocks and deliveries of sugar, and refiners' receipts and meltings of raw sugar will be shown in the monthly statistical statement for June.

The Sugar Division of the Agricultural Adjustment Administration called attention to the fact that included in the reported deliveries for the first half of the year is a larger than normal amount of sugar sold but not physically delivered to buyers.

The preliminary figures for June and the total for the first six months of 1941, as compared with the final figures for 1940, 1939, 1938, and 1937 follow:

June deliveries of direct-consumption sugar by types of distributors, 1937-1941
(short tons, raw value)

	1941[1]	1940	1939	1938	1937
Refiners	511,853	391,573	359,426	466,641	379,728
Beet processors	113,444	144,480	121,704	107,835	91,234
Importers	74,239	74,192	67,329	67,733	65,312
Sub-total	699,536	610,245	548,459	642,209	536,274
Mainland cane mills	[2]	6,186	8,553	7,211	6,391
Total		616,431	557,012	649,420	542,665

January-June deliveries

	1941[1]	1940	1939	1938	1937
Refiners	2,695,736	2,003,638	2,044,916	2,062,489	2,260,181
Beet processors	949,481	658,632	594,698	487,268	642,343
Importers	310,698	365,620	259,617	301,349	360,728
Sub-total	3,955,915	3,027,890	2,899,231	2,851,106	3,263,252
Mainland cane mills	[3]	49,085	62,909	54,229	67,056
Total		3,076,975	2,962,140	2,905,335	3,330,308

Refiners' stocks on June 30, 1937-41
(short tons, raw value)

	1941[1]	1940	1939	1938	1937
Raw stocks	655,322	619,671	449,172	414,489	271,196
Refined stocks	322,528	435,844	479,557	421,570	659,142

[1] Preliminary.
[2] Data not available.
[3] 29,289 tons for January-May. Data for June not yet available.

Some Self Help Available to All Farmers

On July 3, Mr. P. J. de Gravelles, County Agent of St. Mary Parish, conducted a tour of about sixty farmers and out-of-parish visitors to look over the roguing work in the organized fight against Mosaic disease of sugarcane.

The following farms, (Mr. Robert Luke's, Sterling Plantation; Oak Bluff Plantation; and Bellevue Plantation) were visited. Large acreages of sugarcane planted from rogue seed plots were visited. It was very encouraging to see that Mosaic infestation can be controlled under ordinary field operations. Estimated yields of fifty tons of sugar cane per acre emphasized the practicability of making some effort to keep sugarcane free, or almost free, from Mosaic infestation.

Mr. de Gravelles and the cooperating farmers in St. Mary Parish are to be commended on the successful demonstration conducted on a large scale under ordinary plantation management.

IT NOT ONLY CAN BE DONE, BUT IT IS BEING DONE!

To Parish Administrative Officers and County Committeemen in Parishes Producing Sugarcane for Sugar.

Re: 1941 Proportionate acreage share sugarcane abandoned prior to measurement.

Dear Sir:

It has come to the attention of this office that some producers of sugarcane for sugar have again abandoned acreage prior to the measurement of farms for compliance because of a poor stand of sugarcane resulting from one or more of the bona fide causes of abandonment, such as drought, flood, storm, freeze, disease, or insects, and that such acreage has not been recorded as acreage planted within the proportionate share for the farm.

In the event that in 1941 a parish may be eligible to receive deficiency and/or abandonment payments, there may be some producers who may wish to qualify for a payment on acreage plowed out or abandoned prior to measurement. In order that such claims for payment may be substantiated by bona fide evidence, producers will be called on to prove to the satisfaction of the county committee that (1) proportionate share acreage was actually abandoned, (2) the number of acres actually abandoned, and (3) whether the acreage so abandoned was actually planted to sugarcane prior to abandonment for harvest during the 1941 crop.

Attached herewith you will find a sample statement, similar to the statement used during the 1940 crop, which will be used for the establishment of bona fide acres abandoned prior to measurement. This form will be filled in by each operator of a farm wishing to establish bona fide abandonment, signed by him and approved by the parish administrative officer and a county committeeman. The statement shall be prepared in triplicate, the original to be attached to Form LS-407 and it shall be prepared only when the planted acres are within the proportionate share and only when the operator abandoned planted proportionate share acreage for a bona fide cause for abandonment prior to measurement. Line 4 of this statement, whenever used, must agree with line 18, Form LS-407, on all Forms LS-407 where the total planted acres measured for harvest for the 1941 crop is equal to or less than the 1941 proportionate share for the farm.

There may be parishes that have not yet completed measurement for compliance on their sugarcane farms. In those instances a compliance supervisor may obtain the information required and have the same signed by the operator at the time of checking.

Yours very truly,
G. J. Durbin,
Administrative Officer in Charge.

Editor's Note—Be sure that your abandoned acres within your proportionate share acres are properly recorded. Consult your County Agent or the AAA Administrative Officer in your parish.

Louisiana Sugar Planters' Field Day

The Louisiana Sugar Planters' Field Day will be held at the Experiment Station at Baton Rouge on Thursday, August 14th. The program will consist of a trip through the fields to inspect new varieties and other points of interest during the forenoon and a short indoor program in the afternoon.

NOTICE!

The American Sugar Cane League has been directed by the U. S. Department of Agriculture and the Louisiana Experiment Station to undertake a fair and impartial distribution of the newly released variety of cane known as

C. P. 33-243

A number of small plots of this cane are subject to this distribution. It has been grown with the understanding that those growing it shall be paid for it at the price of mill cane plus $1.50 per ton for cutting it and loading it on the vehicle of the purchaser and the League is authorized by the U. S. Department of Agriculture and the Louisiana Experiment Station to charge a distribution fee of 85 cents a ton.*

If you wish some of this cane please fill out and sign the application blank on the reverse hereof. NO OTHER FORM OF APPLICATION WILL BE ACCEPTED, AND IT MUST BE RECEIVED AT THE OFFICE OF THE AMERICAN SUGAR CANE LEAGUE, 407 CARONDELET STREET, NEW ORLEANS, NOT LATER THAN SEPTEMBER 20th, 1941.

In the absence, at this time, of exact figures supplied by the Government on the amount of the benefit payment for 1941 the precise price of mill cane is not known. You are therefore required to agree to pay the best approximation we can now make, $4.65 per ton or actual mill price plus benefit payments.

Deposit of 85¢ per ton must be made with application

Remember—

The last day on which applications will be received is September 20th, 1941.

---

*This is to cover the cost of distribution, which involves clerical, stenographic and administrative work, printing, postage and a very heavy responsibility. It is likewise a partial reimbursement to the League for various extraordinary expenses incurred in bringing about the acquisition of new canes and the preliminary experimentation therewith before release. The League has been designated by the U. S. Department of Agriculture and the Louisiana Experiment Station to make the distribution simply because they believe it will carry out the task more efficiently, and certainly more cheaply, than any other agency.

The American Sugar Cane League
407 Carondelet Street
New Orleans, La.

_____1941

I hereby apply for:

.....tons of C. P. 33-243 seed cane.

I understand the cane will cost me a total of approximately Seven Dollars a ton, as follows, and I agree to said cost:

Price of cane standing in the field.....$4.65 per ton or Mill price plus benefit payment (this all goes to the grower of the cane).

Cost of cutting and loading.....$1.50 per ton (this all goes to the grower of the cane).

Distribution charge..... 85¢ per ton (this goes to the American Sugar Cane League).

Total.....$7.00

In case it is necessary to hot water treat the seed cane there will be an additional cost.

I enclose $..... which is a deposit of earnest money at the rate of 85 cents per ton, non-refundable (unless the cane is not tendered me). The remainder I will pay when the cane is ready to be delivered to me, and I am to be notified concerning this and supplied with the name and address of the grower from whom I am to procure the cane, which I will send for not later than November 8th, 1941. Should the cane fail to be tendered to me by that date all payments and deposits made by me are to be refunded in full on each ton not tendered.

I had.....acres of Proportionate Shares Sugarcane in 1940-41.

This application is made with the full understanding on my part that it may not be possible to tender me as much cane as I apply for, owing to the limited supply.

Name.....

Address.....

TEAR ON THIS PERFORATED LINE

Entries of Sugar Against Quotas for First Six Months of 1941

Washington, D. C., July 9, 1941

The U. S. Department of Agriculture today issued its sixth monthly report on the status of the 1941 sugar quotas for the various offshore sugar-producing areas supplying the United States market. The sum of the offshore and continental quotas represents the quantity of sugar estimated, under the Sugar Act of 1937, to be required to meet consumers' needs during the current year.

The report, prepared by the Sugar Division of the Agricultural Adjustment Administration, shows that the quantity of sugar charged against the quotas for all offshore areas, including the full-duty countries, amounted to 3,428,551 short tons, raw value, during the first six months of the year, as compared with 2,396,057 tons in the corresponding period of 1940.

The report includes sugar from all areas recorded as entered or certified for entry before July 1, 1941. The figures are subject to change after final outturn weight and polarization data for all entries are available.

There were 133,644 short tons of sugar, raw value, charged against the quota of 448,000 tons for the mainland cane area, and 836,037 short tons, raw value, against the quota of 1,652,571 tons for the continental sugar beet area, during the period January-May this year. Data for these two areas are not yet available for June.

The quantities charged against the quotas for the offshore areas during the first six months of the year and the balances remaining are as follows:

Area	1941 Sugar Quota	Quantity charged against quota	Balance Remaining
	(short tons, 96° equivalent)		
Cuba	2,038,230	1,571,489	466,741
Philippines	1,098,068		
Less amount reallotted on April 11 and June 27	115,405		
	982,663	639,042	343,621
Puerto Rico	850,844	667,940	182,904
Hawaii	1,000,177	492,564	507,613
Virgin Islands	9,507	1,764	7,743
Foreign countries other than Cuba	143,569	55,752	87,817
Total	5,024,990	3,428,551	1,596,439

Direct-Consumption Sugar

Direct-consumption sugar is included in the above amounts against the various quotas.

Area	1941 Quota	Quantity charged against quota: Sugar Polarizing 99.8 degrees and above	Sugar Polarizing less than 99.8 degrees	Total Charge	Balance Remaining
		(short tons—96° equivalent)			
Cuba	375,000	255,243	19,047	274,290	100,710
Puerto Rico	126,033	105,278	9,829	115,107	10,926
Hawaii	29,616	2,942	1,503	4,445	25,171
Philippines	80,214	29,569	795	30,364	49,850
Total	610,863	393,032	31,174	424,206	186,657

Quotas for Full-Duty Countries

Area	1941 Quota	Quantity charged against quota	Balance Remaining
	(in pounds)	(in pounds)	(in pounds)
Canada	3,232,800	592,539	2,640,261
China & Hongkong	1,650,846	254,112	1,396,734
Dominican Republic	38,209,282	38,209,282	0
Haiti	5,280,694	5,280,694	0
Mexico	34,561,653	381,758	34,179,895
Peru	63,681,946	63,681,946	0
Quotas not used to date	136,756,639		136,756,639
Unallotted reserve	3,764,140	3,103,531	660,609
Total	287,138,000	111,503,862	175,634,138
Tons	143,569	55,752	87,817

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"How Much Sugar Is Available to the Consumers in the United States"

(By C. J. Bourg)

In view of the fact that all persons engaged in the domestic sugar industry are chiefly concerned these days about the supplies of sugar and the prices of raw sugar and refined sugar at wholesale and retail, the following discussion by Congressman Fred L. Crawford of Michigan will undoubtedly prove interesting reading to everyone of our readers. Mr. Crawford was for many years connected with the production and distribution of beet sugar, prior to being elected to Congress, and his analysis is certain to command the attention and consideration of sugar people generally. On August 1 Mr. Crawford presented the following statement and tables to the House of Representatives, as printed in the Congressional Record at page 6806. He has submitted a table setting forth in detail the apparent available supplies of sugar for 1941 and also for 1942. He also inserted as a supplement to the table presented by him, the table prepared by the Bureau of Agricultural Economics dated June 16, 1941, in which the Department of Agriculture announced its estimate of supplies available for the United States in 1941.

Supplies of Sugar Available for the United States in 1942

Under conditions likely to exist in 1942, sugar available to the United States from normal sources of supply will not reach more than 6,734,000 tons. This is in contrast to the figure of 7,986,000 tons estimated here for 1941 or 8,900,000 tons as estimated recently by the Department of Agriculture. The marked shrinkage in potential supplies has taken place notwithstanding a liberal allowance made in the table for increased production in domestic areas and Cuba.

Details of computation are shown in the accompanying table. Starting with initial stocks and known production in 1941, appropriate allowances have been made for local consumption, exports to other markets, and normal reserve stocks. After deducting estimated United States consumption for 1941, the resulting figures may be taken as indicative of stocks at the beginning of 1942.

In projecting the picture another 12 months, substantially the same procedure has been used. Production, however, has been estimated at the maximum which may be expected of individual areas during the ensuing year. Although estimates of local consumption show little change, adjustments for sales to foreign markets have been increased for reasons discussed hereafter. The various remainders represent sugar supplies available for meeting United States consumption requirements in 1942.

These figures are premised upon certain basic assumptions. The following are those considerations deemed to be most influential in determining supply and demand conditions in 1942:

(1) The growing scarcity of ships will force a greater and greater reliance for sugar supplies on those areas from which the sea lanes are shortest and most easily protected. This means that in 1942 shipments from the Philippine Islands will in all probability be eliminated. In addition, shipments from Hawaii may be substantially curtailed. The Maritime

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407 Carondelet St., New Orleans

Marcel J. Voorhies, Editor

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The Producers & Mfrs. Protective Assn.
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Commission has already drafted plans for the diversion of shipping to the far eastern trade in order to obtain needed stocks of tin and rubber. As a result, the Western Hemisphere may be forced to rely for its entire sugar requirements on continental United States and West Indies production.

(2) Elimination of Philippine and the curtailment of Hawaiian sugars appears more probable in view of the limited refining capacity existing on the Pacific coast. Approximately three-fourths of Philippine shipments and one-third of Hawaiian shipments now move to Atlantic ports for refining by way of the Panama Canal. Not only do these movements tie up valuable shipping for a prolonged period, but traffic through the Canal itself will become increasingly congested. Nor can these sugars be economically moved overland inasmuch as the freight from the Pacific coast to Atlantic seaboard refining centers would add approximately 1 cent to the present price of sugar.

(3) The requirements of the Western Hemisphere must necessarily include those of the United Kingdom. The economic and military interests of the American and British Governments are becoming more and more alike, with the result that British sugar requirements will have the same priority as those of the United States and Canada. Moreover, the scarcity of ships will force the United Kingdom to obtain the greater part, if not all, of its imports from the Western Hemisphere in order to avoid the long, dangerous haul from those far eastern areas with which it has dealt in the past.

(4) The United Kingdom in a normal year imports about 2,500,000 tons of sugar. Strict rationing has reduced the amount of sugar consumed in the British Isles to a figure about one-half this size. Nevertheless, it is safe to assume that Cuba and the Dominican Republic together will be called upon to provide from 750,000 to 1,000,000 tons during the coming year. Any of this sugar which, through submarine or air attack, fails to reach the British Isles will, of course, reduce the available supply by that amount.

(5) Increased use of high-test molasses for the production of industrial alcohol will also exert a demand upon the sugar-producing capacities of the Western Hemisphere. To the extent that cane is converted directly into high-test molasses, the sugar-producing potentialities of that area will be correspondingly reduced. Estimates of the sugar equivalent of high-test industrial molasses range upward as high as 1,000,000 tons. For the sake of conservatism, it has been estimated here that Cuba will supply sugar equivalent in the form of high-test industrial molasses in the amount of 500,000 tons.

(6) The same forces operating to eliminate or to curtail sugar shipments from the Philippine Islands and Hawaii will operate to prevent shipments from such South American areas as Peru, Argentina, and Brazil. Of these countries only Peru, in the past, has shown any interest in the United States market. Shipments even from this country have been relatively small. In view of the long hauls involved, the necessity to economize on shipping space and shipping time will preclude such areas from supplying any appreciable amount of sugar to the United States market. This fact has been recognized by Dr. Joshua Bernhardt, Chief of the Sugar Division, in discussing the subject before members of the New York sugar trade.

(7) All continental and nearby areas currently supplying United States market may be expected to increase their production in 1942. This increase, however, will be less than that required to offset the probable demand from the United Kingdom and the loss in shipments from the Philippine Islands and Hawaii. Possibilities of expansion in the continental beet area will be limited by the growing shortage of farm labor and the higher price for alternative crops. A limiting factor in expansion of continental cane production will be the damage sustained in Louisiana due to the freezes of last year. Expansion in Puerto Rico will be limited both by the lower yields obtainable from the large amount of carry-over cane and by the uncertainties caused by insular legislation affecting the management of sugar lands. Of all the areas now supplying the United States market, Cuba is in a position to expand most rapidly and in greatest degree. Nevertheless, even in this case the nature of cane cultivation is such that the maximum crop to be anticipated in 1942 can scarcely exceed 3,700,000 tons.

Analysis by Mr. Crawford:

Apparent Available Supplies of Sugar for 1941

[Thousands of tons, raw value]

	Stocks on Jan. 1, 1941	1941 Crop	Total supply	Local consumption	Exports other than sugar to United States	Normal reserve stocks	Available for United States in 1941
Normal sources of United States supply:							
Refiners and importers	713		713			700	13
Raw sugar mills	62	[1] 599	661			200	461
Beet-sugar factories	1,602	[2] 1,579	3,181			1,277	1,904
Puerto Rico	150	929	1,079	72		180	827
Virgin Islands	0	8	8	1			7
Cuba	1,345	2,734	4,079	175	[3] 400	663	2,841
Hawaii	0	969	969	35		0	934
Philippines	23	1,092	1,115	115		1	999
Total	3,895	7,910	11,805	398	400	3,021	[4] 7,986
Alternative sources of supply:							
Dominican Republic	24	420	444	22	267	25	130
Haiti	4	34	38	9	4	4	21
French West Indies	0	121	121	6	0	0	115
British West Indies	0	476	476	55	421	0	0
Peru	80	504	584	111	200	50	223
Total	108	1,555	1,663	203	892	79	489

Apparent Available Supplies of Sugar for 1942

	United States 1941 consumption [5]	Available stocks on Jan. 1, 1942	Estimated 1942 crop	Available stocks plus 1942 crop	Estimated local consumption	Exports other than sugar to United States	Available for United States in 1942
Normal sources of United States supply:							
Refiners and importers		13		13			13
Raw-sugar mills	495	[6] 34	550	516			516
Beet-sugar factories	1,825	79	1,750	1,829			1,829
Puerto Rico	940	[6] 113	1,100	987	85		902
Virgin Islands	7	0	10	10	1		9
Cuba	2,251	590	3,700	4,290	175	[7] 1,250	2,865
Hawaii	934	0	[8] 635	635	35		600
Philippines [9]	983						
Total	7,435	535	7,745	8,080	296	1,250	6,734
Alternative sources of supply:							
Dominican Republic	69	61	450	511	22	300	189
Haiti	9	12	40	52	9	4	39
French West Indies		115	135	250	6	0	244
British West Indies		0	500	500	55	445	0
Peru [9]	115						
Total	193	188	1,125	1,313	92	749	472

[1] Includes 74,000 tons of sugar made from cane grown in previous year.
[2] Includes 144,000 tons of sugar made from beets grown in previous year.
[3] Includes 200,000 tons of sugar estimated as required by United Kingdom and 200,000 tons of sugar equivalent of high-test industrial molasses.
[4] Compares with Department of Agriculture estimate of 8,900,000 tons.
[5] Represents official consumption estimate of 7,627,563 tons after reallotment of indicated deficits for Hawaii, Virgin Islands, and certain foreign areas other than Cuba.
[6] Represents requirements filled out of normal reserve stocks.
[7] Includes 750,000 tons of sugar estimated to be required by United Kingdom and 500,000 tons of sugar equivalent of high-test industrial molasses.
[8] Represents production necessary for normal shipments of Hawaiian sugar to west coast only.
[9] Represents anticipated elimination of receipts due shipping shortage.
Compiled from reports of the U. S. Department of Agriculture, trade figures, and private estimates.

Analysis of Department of Agriculture:

Sugar—Supplies Available for United States in 1941

Country	Jan. 1 stocks	Production		Total supply	Local consumption	Estimated exports to markets other than United States	Reserve stocks at end of year	Available for United States
		1940 Crop	1941 Crop					
United States:	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons	1,000 tons
Cane sugar:								
Refiners and importers	713			713			550	163
Cane sugar mills	62	74	525	661			200	461
Beet sugar	1,602	144	1,435	3,181			1,240	1,941
Puerto Rico	150		908	1,058	72			986
Virgin Islands	0		8	8	1			7
Cuba	1,345		2,726	4,071	175	200	500	3,196
Hawaii	0		1,000	1,000	35			965
Philippine Islands	23		1,282	1,305	115		1	1,189
Total	3,895	218	7,884	11,997	398	200	2,491	8,908
West Indies:								
Dominican Republic	24		420	444	22	100	25	297
Haiti	4		34	38	9	4	4	21
French West Indies	0		121	121	6	0	0	115
British West Indies	0		471	471	55	416	0	0
Total	28		1,046	1,074	92	520	29	433
South America:								
Argentina	222		593	815	473	100	100	142
Brazil	94		1,425	1,519	1,203	10	94	212
British Guiana			213	213	8	205	0	0
Peru	80		504	584	111	200	50	223
Other Countries			136	136	385	−249	0	0
Total	396		2,871	3,267	2,180	266	244	577

Source: Division of Statistical and Historical Research, Bureau of Agricultural Economics. Compiled from official sources and trade reports.

On the basis of estimates presented here, those areas now supplying the United States with its sugar will fail to meet the country's full 1942 requirements. After allowing for reduction in Philippine and Hawaiian supplies, and after anticipated diversions to industrial molasses and requirements on the part of England, the supply of sugar remaining for the United States in 1942, barring normal reserves, will presumably total only 6,734,000 tons. In addition to this sugar in areas normally serving the United States, limited supplies may become available in other nearby areas in the West Indies. Such sugars, however, have been estimated at not to exceed 470,000 tons. Even if these alternative sources be included, apparent supplies available for United States consumption in 1942 will fall more than 400,000 tons short of this year's most recent consumption estimate.

Repeated emphasis as to the adequacy of supplies for 1941 has obscured the situation which will confront the country in 1942. This situation presages a definite shortage in supplies emanating from customary sources. In view of this, it is essential that responsible officials should turn their attention to ways and means of broadening the supply to be obtained from domestic areas. The domestic sugar industry is the first line of consumer defense, and as such should merit primary consideration.

Analysis of Mr. Crawford:

Soybean As a Green Manure Crop in Rotation With Sugarcane Under Louisiana Conditions

(By George Arceneaux, Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, U.S. Department of Agriculture).

A Preliminary Report

An experiment designed to compare the effect of 3 common practices with regard to soybean in the sugarcane rotation was started 10 years ago at the Houma Station. In one series of plots the soybean vines were removed by cutting at the ground surface as commonly done for the purpose of making hay, and no fertilizer was added on plant cane. In the second series the soybean were turned under, and no fertilizer was added on plant cane. (This was considered standard practice at the time the experiment was started.) In the third series of plots, soybean vines were removed as in the first series an ammonium sulfate (21% N) was applied to plant cane at the rate of 190 pounds per acre. In each of the two stubble crops, plots of all series were fertilized with 12-4-4 mixture (N P K) applied at the rate of 333 pounds per acre. Each treatment was replicated sixfold on 5-row plots, 62 feet long. The two outside rows served as buffers and were not included in the experimental area. Each treatment has been repeated one the same series of plots from cycle to cycle thus making is possible to measure the cumulative effect of individual treatments.

While it is felt that the experiment has not yet extended over a sufficiently long period of time to permit a reliable evaluation of the fundamental value of the different practices in the study, results obtained so far are considered of sufficient interest to a warrant a preliminary report at this time.

Yield Results

Table 1 gives yields of cane per acre, sugar per ton of cane and sugar per acre obtained in each of the 7 sugarcane crops so far harvested. It will be noted that removing the soybean vines without the application of fertilizer on the plant cane resulted in a very consistent decrease in yields of cane and sugar per acre as compared with the practice of plowing under the entire soybean crop. In the aggregate of 7 crops the differences amounted to 12.21 tons of cane and 2074 pounds of sugar per acre. On the other hand where the soybean vines were removed and approximately 40 pounds of nitrogen applied to the plant cane crop, the yields were consistently better than where the soybeans were turned under and the plant cane not fertilized, the differences in the aggregate of 7 crops being 9.36 tons of cane and 2157 pounds of sugar per acre. By comparing results of treatments A and C we find that an application of 40 pounds of nitrogen per acre on plant cane where the soybean vines had been removed gave an increase of 21.57 tons of cane and 4204 pounds of sugar per acre. It will be noted that yield increases due to green manuring or fertilization of plant cane were obtained largely in the plant cane crop but stubble yields were also slightly in favor of the latter treatments.

In the first crop cycle, the variety Co. 281 was used on all replications; in the second cycle, two replications were devoted to Co. 281, two to C.P. 28/19 and the other two to Co. 290; and in the present cycle four replications are devoted to Co. 290 and two to Co. 281. Average yield trends discussed above were rather consistently maintained in the case of individual varieties, as well as in each of the 3 crop cycles.

It is interesting to note that average differences in

TABLE 1.—Yields of cane and indicated yields of sugar obtained in connection with experiment to determine the effect of certain practices in connection with the soybean crop in rotation with sugarcane, Cut A-9, Houma Station.

Treatment	Cycle 1			Cycle 2			Cycle 3	Total or Average of 7 crops	Gain (+) or loss (—) as compared with standard
	1932 Plant	1933 First Stubble	1934 Second Stubble	1936 Plant	1937 First Stubble	1938 Second Stubble	1940 Plant		
Yield of cane per acre									
A(1)	26.13	28.83	23.09	34.41	23.78	21.95	17.74	175.93	−12.21
B	28.96	29.25	23.88	35.42	25.33	23.20	22.10	188.14	Standard
C	32.61	30.00	23.68	37.17	25.22	23.79	25.03	197.50	+9.36
Indicated yield of 96° sugar per ton of cane									
A	227.6	188.1	187.7	184.0	189.0	177.7	205.6	193.7	+1.7
B	223.4	188.6	187.1	177.3	184.5	187.2	198.0	192.0	Standard
C	230.7	188.2	188.9	173.3	193.4	188.2	193.4	193.8	+1.8
Indicated yield of 96° sugar per acre									
A	5946	5422	4334	6332	4495	3901	3647	34077	−2047
B	6471	5517	4467	6279	4673	4342	4375	36124	Standard
C	7523	5646	4474	6442	4877	4478	4841	38281	+2157

(1) A—Soybean vines removed; no fertilizer on plant cane.
B—Soybeans buried; no fertilizer on plant cane.
C—Soybean vines removed; plant cane fertilized at rate of 190 lbs. ammonium sulfate (21% N) per acre.

indicated yields of sugar per ton of cane between the three treatments were very small and definitely insignificant. Results obtained in 1936 and 1940 indicate that the use of fertilizer on plant cane may have had a depressing effect on sucrose content. However due to compensating differences in the course of the other crops, avcrage yields of sugar per ton of cane for the 3 treatments were almost identical.

Stand Counts, 1941 Crop

Table 2 gives results of stand counts on first stubble of the 3rd crop cycle made during April and May 1941. It will be noted that in the case of both Co. 281 and Co. 290 the worst were obtained where the soybean vines had been repeatedly removed without the addition of fertilizer on plant cane and the best stands were obtained where the practice of removing the soybean vines and fertilizing cane had been followed. In the case of Co. 290 stands ranged from good to fair in series C to a practical failure in series A. With Co. 281 observed diffcrencces in stand attributable to treatment, while unquestionably significant from a statistical as well as economic standpoint were not as great as observed with Co. 290.

It will be noted further that treatment A which has consistently given the lowest yields of cane per acre and which presumably has maintained a correspondingly low level of soil fertility gave the poorest 1941 stubble stands and conversely, treatment C which has given the highest yields of cane per acre due presumably to the correspondingly high level of soil fertility maintained, gave the best 1941 stubble stands.

The obvious relationship between soil fertility and rate of stubble germination indicated by results discussed above is considered extremely interesting in the light of widespread stubble failures experienced with the 1941 crop. It is considered significant that Co. 290 which proved to be the most sensitive variety to apparent differences in soil fertility also gave some of the most extensive and serious stand deficiencies in commercial plantings.

Growing conditions during the summer of 1940 were on the whole quite unfavorable. Continued rains during the month of June permitted very little cultivation and in most cases the usual ridging at "lay by" could not be satisfactorily accomplished. The prolonged water-logged condition of the soil must also have interfered with nitrification. It is considered significant that throughout most of the growing season the crop presented an appearance characteristic of nitrogen starvation.

It is probable that the extremely poor stubble stands of 1941 are due largely to the very unfavorable growth conditions experienced during 1940. The unprecedented freeze of 22° F on November 15 which killed nearly all eyes down to the ground surface was no doubt an additional contributory factor. On the other hand results given in table 2 indicate that the effect of some prevailing soil management practices in the utilization of legume crops and in the use of fertilizer may have been important predisposing factor. At least it would seem to be in order for us to examine our farming practices with reference to soil fertility balances before condemning Co. 290 or any other variety too severely.

TABLE 2.—Results of stand counts on first stubble of Legume-Sugarcane Rotation Experiment, Houma Station, 1941.

	Average number of shoots per acre						Percent of mean stand					
	Co. 290 (4 plots)		Co. 281 (2 plots)		All Plots		Co. 290		Co. 281		All Plots	
Treatment	April 14	May 8	April 14	May 8	April 14	May 8	April 14	May 8	April 14	May 8	April 14	May 8
A(1)	1240	1800	3240	4120	1907	2573	31.5	37.1	66.5	67.8	44.9	48.9
B	2980	3730	5280	6840	3747	4767	75.8	76.8	108.3	112.5	88.2	90.6
C	7580	9030	6100	7280	7087	8447	192.7	186.1	125.2	119.7	166.9	160.5
Mean	3933	4853	4873	6080	4247	5262	100	100	100	100	100	100

(1) See footnote Table 1.

Australia's Sugar Industry

(By Pedro Mass, Barcelona University engineer, now an executive of the Colonial Sugar Refining Company)

The sugar industry is an integral factor in the economic structure of Australia. To begin with, it supplies the whole of our population with one of its essential commodities. The interests involved in it are vast. It has been the major cause for the settlement of a white population in one of the more difficult portions of this huge and open land of ours. The importance, not only in our economy, but in our defense scheme cannot be overrated.

It may not then be out of place to give a brief account of its history. The sugar cane is not indigenous to Australia, but it is believed to have been introduced about 1817. Before 1866 all sugar-requirements in Australia were imported. About that time, Captain Louis Hope started to operate a small mill in the Colony of Queensland for commercial purposes; but the first refineries in Australia operated on imported raw sugars. As early as 1843 the late Sir Edward Knox controlled a small sugar refinery in Sydney, the basis for the foundation of The Colonial Sugar Refining Company, which was later to become the leading factor in the sugar industry. In 1868 both the growing of sugar and the production of raw sugar developed into an Australian industry.

By 1880 there were about two hundred small sugar mills, none of which, however, exists today, having been replaced by some thirty-six large and well-equipped factories. Later on, when in 1901 the Australian Colonies united into the present Commonwealth, the Federal Government undertook the protection of sugar production against competition from other countries. This was a defense measure. The State of Queensland has 670,500 square miles largely within the Tropics. For 1,000 miles the coast is fringed by rich tropical rain forest. The Federal Government encouraged the sugar industry as the only means of keeping a white population in this vulnerable defense area. Until 1915 this industry was entirely in the hands of private enterprise, and the production of raw sugar was limited by the requirements of local consumption; but there were often deficiencies, which were made good by importing raw sugars to be refined in Australia. The Colonial Sugar Refining Company fixed the wholesale prices upon the basis of that ruling in the world markets, and

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at the beginning of the world war the wholesale price in Australia of first grade refined sugar was £21 per ton, and the retail price threepence per pound.

From that time, due to a number of causes, the price of sugar rose in Europe and elsewhere, and it is since then that the sugar industry in Australia has been to some extent under the joint supervision of the Commonwealth and the Queensland Governments.

It happened that in 1919 the production in Australia fell to some 175,000 tons, it thus being necessary to import nearly as much again to fulfill requirements. This led to the Government's encouraging the sugar-cane grower and the sugar miller to the extent of paying the latter £30/6/8 (about $121.00) per ton of raw sugar. These conditions led in turn to the appearance of a surplus of nearly 200,000 tons in 1925. From that year onwards there have been substantial quantities of sugar exported abroad, and the granting of preferential tariff assistance by Great Britain and Canada on sugar has materially helped the industry in Australia and other parts of the Empire.

The actual position is that under agreement with the Commonwealth Government, and under certain statutory powers, the Government of the State of Queensland acquires all the manufactured raw cane sugar; but, as it owns no refineries, it avails itself of the services of refining companies which do all the work: they pay the mill-owner for his raw sugar, arrange transport to the refineries, refine it, and sell the refined sugar at statutory prices.

It is an outstanding fact that this industry has been subject in this country, for the benefit of the public, to investigations by official commissions. These have specially stressed the high standard of efficiency in the industry. Considering that the average household consumption of sugar in Australia is 112 pounds per annum, that all the sugar consumed is cane sugar, and that not one ounce of it is imported, it becomes evident that the interests of the people in this respect have to be well cared for.

Most of the cane in Australia is grown by individual farmers, of whom there are about eight thousand, cultivating about 325,000 acres. There are now in Australia thirty-six raw-sugar mills, thirty-three of which are located in the State of Queensland; there are six refineries, five of which are owned by the Colonial Sugar Refining Company, located one in each of the mainland capital cities

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tends from July to December, the largest mills crushing some 12,000 tons of cane per working week of five and a half days, with a production of about 1,700 tons of raw sugar. Refining, on the other hand, continues throughout the year, and the largest of the refineries can produce about 4,000 tons of refined sugar per working week of five and a half days.

The official protection received by the Australian sugar industry is along the lines followed by almost every producing country in the world, whether it be a producer of beet or cane sugar. This almost universal protection has reduced the actual "open" market to only eight per cent of the world's sugar production.

Because her home sugar market is protected, Australia has been able to sell some of her sugar in this free market at world prices. As an essentially exporting country, Australia must be able to sell abroad in order to maintain living standards at a satisfactory standard at home.

Since the high home cost of sixpence (about 10 cents) per pound in 1920, necessitated by large purchases of foreign sugar acquired at greatly inflated prices, the cost has been gradually reduced to fourpence per pound, this being made possible by the high state of efficiency in the industry and despite the rising cost of living all over the world during the period between the two great wars.

Australia, being at war with the Axis Powers, is resolved to pool every ounce of her energy and of her resources into the greatest war effort that the British race has ever known.

Absolutely everything, then, counts—from battleships to sugar. It is, therefore, this country's good fortune to find itself in the possession of solid national industries such as its great sugar industry, that mean so much in the economic structure of the nation.

Gas From Sugar and Wheat

MELBOURNE, AUSTRALIA, June 6—Supply Minister Phillip McBride announced that the Power Alcohol Committee had recommended that production should be increased from 2,000,000 gallons annually to 52,500,000.

The Committee, which has been surveying Australian resources and industrial plant for several months, reported that wheat and cane sugar could yield alcohol at 33 cents a gallon to be used as a 15 per cent blend in all sold gasoline.

The 52,500,000 gallon production would be attained by using existing molasses stills which are idle for long periods each year, and by constructing new plants. Since war, Australia has curtailed gasoline imports to preserve dollar credits for vital war purchases. Gasoline rationing restricts private car owners to gasoline purchases calculated on horsepower to restrict driving to 2,000 miles a year.

NOTICE

After August 16th, 1941, the address of The American Sugarcane League will be 414 Whitney Building, New Orleans, La.

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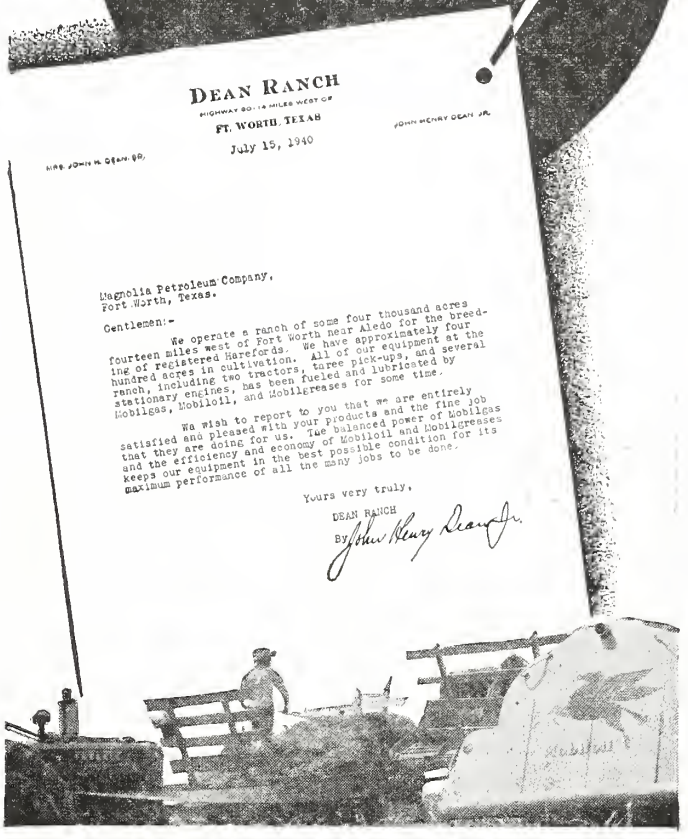
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The statements in the letter above were voluntary, and no compensation of any kind was given to Mr. Dean.

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We stand for the encouragement of Home Industries as against foreign Competition

Vol. 19 NEW ORLEANS, LA., SEPTEMBER 1, 1941 No. 23

Brief Filed on Behalf of the American Sugar Cane League August 23, 1941

To the Committee for Reciprocity Information,
U. S. Tariff Commission Building,
Washington, D. C.

The American Sugar Cane League of Louisiana herewith submits a brief statement of its views as the representative organization of producers of sugarcane, sugar, syrup, and molasses, in the State of Louisiana, with respect to the proposed negotiation of a supplementary Trade Agreement with the Government of Cuba.

The announcement of the Acting Secretary of State and of the Committee for Reciprocity Information, dated July 26, 1941, does not indicate or outline any proposals, plans, or intentions, in connection with the negotiations to be had on Paragraph 501 or Paragraph 502 of the United States Tariff Act of 1930. The announcement merely declares that sugars, syrups, and molasses will be considered, but no indication is offered as to how or to what extent the rates of import duty may be changed, or whether there will be alterations in the language or provisions of the Reciprocal Trade Agreement now existing between the Governments of the United States and of Cuba.

Frankly, and in complete candor, we are apprehensive that the troubled conditions in world affairs are not conducive to adjustments of the tariff policies of the United States. The times are not opportune for fixing policies which are part of the permanent program involving foreign trade. In fact, it is unfortunate that negotiations should be contemplated by our Federal Government at a time when national unity is avowedly the greatest desire of the National Administration. Negotiations on tariff reductions or change of relationships between domestic and foreign policy should be postponed until the war emergency is over.

At the very least, we sincerely and urgently request the Department of State to announce in some detail the changes which will be considered by the negotiators, in the provisions of the Cuban Trade Agreement with regard to sugar, syrup, and molasses.

Under the above circumstances, it is necessary for appearer to assume that the Department of State will consider a reduction in the rate of import duty on Cuban sugar. It is our understanding of the Tariff Act of 1930, as amended, that the President of the United States is without authortiy to reduce the rate on any article below 50% of the rate existing at the time of the enactment (June 12, 1934) of the provisions granting powers to the President for the purpose of negotiating reciprocal trade agreements with foreign governments. As the rate of import duty on Cuban sugar was $1.50 per hundred pounds at the time of such enactment, the authority of the President does not extend beyond a reduction to a rate lower than $0.75 per hundred pounds of Cuban raw sugar.

There is no apparent need for a reduction in the import duty on Cuban sugar at this time and under present conditions, as the price so far received in 1941 by Cuban producers for sugar imported into the United States represents greater profits for Cuba than she has enjoyed in recent years. The Cuban sugar industry is certainly able to operate profitably under present conditions and at present prices, with the United States, Canada, and England so greatly dependent upon Cuba for sugar supplies in 1942 and until peace is finally declared.

Besides, the amount of sugar which Cuba is permitted to import during 1941, under the quota system and under the most recent estimate of consumption by the Secretary of Agriculture, adds up to 2,374,000 tons, which is a greater amount of sugar than Cuba

THE SUGAR BULLETIN

414 Whitney Bldg., New Orleans

Marcel J. Voorhies, Editor

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has marketed in the United States since the quota control program was inaugurated in 1934. Consequently, with a higher price for their products and the guarantee of a larger volume of importation, the Cuban sugar industry is enjoying the most favorable trade relations that have existed since the reciprocal trade policy and the sugar control Act were first adopted by the United States.

From the standpoint of the American consumer, the theory of tariff protection held by some might lead one to the conclusion that a reduction in the import duty on Cuban sugar will necessarily result in a proportionate reduction in the price of sugar sold at retail to the consumers in the United States. While that result may be attained in some cases, we are now undergoing an emergency situation which directly and abnormally affects both the actual and the theoretical consumption and price of sugar. The extent of that emergency has not yet been determined because there have been so many unusual influences which have destroyed or nullified the effectiveness of normal market factors.

The supplies of sugar in all of the countries of the world are evidently sufficient in quantity to fulfill the normal consumption requirements of all of the peoples of the world. But the effect of the several wars (including embargoes and other policies incidental to war) which are being waged in different continents and on different oceans has been to make it impossible for the chief sources of normal supply to transport and deliver their sugars to the chief consumption areas of the world.

In the case of the United States, the reduced number of available ships and the effects of the hazards of war upon shipping on the Pacific and Atlantic Oceans have reduced the potential supply of sugar so greatly, that the self-sufficiency of the Western Hemisphere in terms of sugar supply could be placed in serious jeopardy within a matter of months. In addition, the business practices of manufacturers, wholesalers, and retailers have been greatly changed with regard to reserve stocks of sugar. Instead of following their normal procedure since the quota system has been inaugurated, whereby they have reduced their stocks to absolute requirements, these buyers of sugar for consumption have progressively built up their stocks of sugar during the past year in proportion to their fear that the aggravation of war conditions in the world might prevent sugar produced, and on hand in the usual sources of supply, from being delivered into the ports of the United States.

Over and above this fear, they have seen the estimates of consumption increased by the Secretary of Agriculture from an original figure for 1941 of 6,616,-817 to 6,851,889, then to 7,125,561, later to 7,627,563, and finally to 8,006,836 tons. These estimates have been intended to give the impression of an increase in the supply of sugar available to the American consumer, and yet the price of sugar has risen progressively in each month since the first of the year. The point is that the price of raw sugar no longer represents the simple addition of the cost of production in Cuba plus handling costs and the tariff on Cuban sugar; but it represents the anxiety of the processors, handlers, distributors, and users of sugar to protect themselves against possible eventual shortages in case of ensuing war involving the U. S. as a belligerent, and the fear of increased indiscriminate activity of submarine warfare, with consequent sinking of ships. Moreover, the advanced costs of freight and insurance on cargoes present a new important reason for higher prices.

Stated very frankly, the Cubans cannot be expected to reduce the price of sugar by the fifteen cents of possible tariff reduction, but the net effect of such a tariff reduction would be for the Cuban industry to make fifteen cents per hundred pounds more profit. The American consumer will gain exactly nothing.

In connection with the price of sugar, therefore, a reduction in the import duty on Cuban sugar can be expected to have no effect whatsoever to benefit the American consumer. Such a reduction would be international politics, without benefit to United States consumers and eventually to the harm of United States producers.

Since the Department of States has not indicated its intentions, we are forced by the logic and experience of developments since the Cuban Trade Agreement was first negotiated in 1934 to assume that some consideration may be given to a major change of the policy, whereby there has been a concurrent relationship between the quota system in the United States and the reduction in the rate of import duty on Cuban sugar. When the tariff was first reduced from $1.50 per hundred pounds to $0.90 per hundred pounds, the President of the United States pointed out that the removal of that amount of protection would be restored to the producers of sugar beets and sugarcane by means of payments to be made to such farmers upon the conditions prescribed in the Sugar Act. This relationship and concurrence was recog-

nized in the Cuban Trade Agreement itself when it was stated that the reduction in tariff would no longer apply if the quota provisions of the Sugar Act "became inoperative." This relationship was maintained for a period of five years without change. However, in 1939, the President of the United States suspended quotas upon the declaration of war in the first week of September 1939. The immediate effect was to restore duty on Cuban sugar to $1.50, and the Cubans practically withdrew from the market. In December, the President announced a supplementary Agreement with Cuba, whereby the reduction in tariff of $0.90 per hundred pounds was restored as of the date of the proclamation of the President, which was December 26, 1939. The Cubans immediately brought in the balance of their quota before January 1, 1940, which had been conveniently stored in the United States customs' custody. But the quota system was not reinstated until January 1, 1940. Within the five remaining days of 1939, the Cubans entered several hundred thousand tons of sugar at the $0.90 rate, although the quotas were not in effect.

Importantly, however, a new expression had appeared in the supplemental Agreement of 1939. Instead of stating that the tariff rate would be restored to $1.50 when the quota system became inoperative or was suspended, the new language required that the quota provisions in the United States must "expire" before there would be any upward change in tariff. From the point of view of the domestic producers, this was a violation of the spirit of the Cuban Trade Agreement as originally conceived; because, regardless of quotas being suspended, it would permit Cubans to market their entire sugar supply in the United States without quota restriction, subject only to the reduced rate of $0.90 in tariff duty.

If change is made at all in the sugar provisions of the Agreement, the original language should be restored, whereby the lower tariff on Cuban sugar will cease to apply when quotas are suspended. Fundamentally, we urge with all respectful emphasis that the State Department insist upon the use of plain language, which can be readily understood by the ordinary citizens, excluding all ambiguous phrases which have to be interpreted.

We are now approaching the end of 1941, which marks the expiration of the Sugar Act. If there should be no extension of the Sugar Act the quota provisions will "expire" on January 1, 1942, and the rate of duty on Cuban sugar will go back to $1.50 per hundred pounds. Obviously, this approaching date of expiration is intimately connected with the decision to reopen negotiations on the Cuban Trade Agreement. Assuming that the Sugar Act expires, we can anticipate that under the stress of national defense considerations, the Good Neighbor Policy, and western-hemisphere solidarity, the theory might be seriously presented that the quota system and the reduction of tariff should no longer run concurrently but should be dissociated one from the other. The net effect of such a proposition would be to make permanent the lower rate of duty and to remove or eliminate the fundamental relationship that was promised and was granted to the farmers who produce sugarcane and sugar beets in the United States, whereby the temporary removal of specific tariff protections has been compensated for in the exact amount of the reduction, through direct payments of $0.60 per cwt. to sugar farmers under the Sugar Act. We submit that if such a radical change of policy should be submitted, then the negotiators for the United States Government, in order to protect the interests of the producers of domestic sugarcane and sugar beets, should insist upon retaining the comprehensive program outlined about and the relationships established. In addition, a proviso should be included that any reduction in tariff below $1.50 per hundred pounds shall be postponed to take effect only when the Sugar Act has been amended to provide for the payments to domestic producers at the same rate or amount per hundred pounds of sugar as represents the difference between the established rate of $1.50 per hundred pounds and the amount of the tariff rate to which any such reduction may be made.

At a time when the United States Government is seeking funds and revenues with which to meet the mounting costs of national defense, it appears to be inappropriate to reduce the tariff revenues of the United States. Tariff for revenue is an established doctrine of the Democratic Party and of the United States Government which has taken on added significance, in view of the existence of the greatest debt ever owed by the United States Government and the resulting necessity to find new sources of revenue, rather than to reduce the existing sources.

The American Sugar Cane League formally requests that, for the reasons discussed hereinabove in detail, the Committee for Reciprocity Information recommend to the United States Department of State the postponement of negotiations on a supplemental Cuban Trade Agreement, pending the existence of emergency and abnormal conditions. It is submitted that there is presently no reason or justification for a reduction in the rate of import duty on Cuban sugar, and none should be considered pending the war emergency and until Congress shall have determined whether the Sugar Act of 1937 is to be extended. It is the recommendation and plea of the American Sugar Cane League, representing 17,000 producers of sugarcane in Louisiana, that the concurrence of the quota program and the reduction in tariff on Cuban sugar shall be maintained; and that payments to the domestic producers of sugar beets and sugarcane shall remain at that rate per hundred pounds of sugar which is equal to any reduction below the rate of $1.50 tariff on Cuban sugar, said $1.50 being the rate which represents the difference in cost of production according to the report and findings of the U. S. Tariff Commission.

Because of the price control legislation pending in Congress, already anticipated by a price-fixing order in the case of raw sugar, and because of the fact that sugarcane and sugar beet producers in the United States have not received parity in recent years, it is all the more urgent that the proposed negotiations on the Cuban Agreement be suspended until national policies have been more definitely established.

Finally, it is the earnest prayer and request of the American Sugar Cane League that the Department of State announce to the producers of sugar beets and sugarcane in the United States well in advance of the public hearing to be held September 8, 1941, the propositions in mind concerning sugar, syrup, and molasses, on which negotiations are intended to be carried on at some future time in connection with a supplemental Cuban Trade Agreement.

Respectfully submitted,
AMERICAN SUGAR CANE LEAGUE
By C. J. Bourg.

Steps to Make Sugar Supplies Available Taken By U. S. D. A.

Washington, D. C., July 30, 1941.

The Department of Agriculture today announced an increase in the sugar quota supplies for the calendar year 1941 and reallotment of deficits in the quotas of the mainland cane sugar area and Hawaii, and in the duty-paying portion of the Philippine quota. This series of actions is expected to make available 7,769,621 tons of sugar to meet consumer needs. This has been done in part by an increase in the consumption determination from 7,627,563 short tons to 8,006,836 tons, raw value.

The Sugar Division of the Agricultural Adjustment Administration pointed out that the 7,769,621 tons are more than 1,000,000 tons greater than the 6,736,000 tons* of sugar actually consumed in 1940, and are expected to take care of increased consumption and of increased working stocks in the hands of refiners, manufacturers, wholesalers, retailers, and housewives. The desire to carry larger stocks of sugar than in previous years manifested itself in the first three months of this year, although during the second quarter of the year sugar distribution was virtually unchanged from the corresponding period of 1940.

The following table shows the quotas for the various areas which were in effect prior to the present revision, the quotas under the new consumption estimate, the quotas after allotment of the mainland cane, Hawaiian, and Philippine deficits, and the quantity of sugar each of the areas is expected to deliver to the United States market in 1941.

Area	Quotas Under Previous Consumption Estimate	Quotas Under Present Consumption Estimate	Quotas Effective After Reallotment of Mainland Cane, Hawaiian, and Philippine Deficits	Quantity of Sugar Expected to be delivered in 1941
	(short tons, raw value)			
Continental Beet	1,768,996	1,856,957	1,925,499	1,925,499
Mainland Cane	479,562	503,408	445,000[4]	445,000
Hawaii	1,070,641	1,123,878	993,522[5]	993,522
Puerto Rico	910,787	956,075	991,365	991,365
Virgin Islands	10,176	10,682	11,076	8,200
Commonwealth of Philippine Islands	1,060,023[1]	1,118,470[2]	982,663[6]	832,663
Cuba	2,181,825	2,290,314	2,374,852	2,374,852
Foreign Countries other than Cuba	145,553	147,052[3]	282,859	198,520
	7,627,563	8,006,836	8,006,836	7,769,621

[1] Quota of 1,175,428 tons less total of 115,405 tons reallotted to foreign countries other than Cuba on April 11 and June 27, 1941.
[2] Quota of 1,233,875 tons less total of 115,405 tons reallotted to foreign countries other than Cuba on April 11 and June 27, 1941.
[3] Base quota of 31,647 tons plus total of 115,405 tons reallotted from Philippine quota on April 11 and June 27, 1941.
[4] Quota of 503,408 tons less 58,408 tons reallotted to other domestic areas and Cuba.
[5] Quota of 1,123,878 tons less 130,356 tons reallotted to other domestic areas and Cuba.
[6] Quota of 1,233,875 tons less 251,212 tons, representing duty-paying portion of quota, reallotted to foreign countries other than Cuba.

Sugar Division officials also pointed out that the reallotment of any area's deficit does not prevent such area from filling its entire quota during the remainder of the year. Deficit reallotments have been made, they stated, in virtually every year since the sugar quota system started, and every domestic area, except Puerto Rico, has experienced such a deficit at one time or another.

*Sugar deliveries of 6,890,000 tons less 154,000 tons representing estimated increase in "invisible" stocks during 1940.

The Problem of Parity

(Reprinted from Weekly Letter of Lamborn & Company, Inc., New York, N. Y.)

There has been a great deal of misinformation and unintelligent comment on the matter of parity prices for sugar. Attention has been focused on this subject in the last few days when Congress commenced studying legislation designed to fix a ceiling (and possibly a floor) on farm commodity prices in line with the President's recent message, in which he called for such legislation to check inflation.

"Parity" from the viewpoint of farm price legislation, means a price level that for certain purposes is to be used as a base for the fixing of minimum or maximum prices. Just as in golf "par" is a base, so in the same sense the word "parity" is used. The fixing of par or parity is arbitrary, depending upon the authorities who fix it, whether it be in golf or in price legislation. In the case of farm commodities, it is Congress who will fix the parity, or the base.

Generally speaking, the parity price commonly spoken of in connection with basic farm commodities refers to the average price for the period August 1, 1909 to July 31, 1914. The reason that period was chosen, was because it was a somewhat healthy period for the farmers. The price level of farm commodities at that time had a certain purchasing power as translated into those things the farmer purchased; i.e., clothing, machinery, fuel, etc. That period was one where the farmer had not only a balanced economy, but where he was getting what was considered a fair return for his labor. Therefore, you may bear in mind, subject to such adjustments as Congress may deem advisable, that the purchasing power of that era will probably be considered in the fixing of the future price range of farm commodities.

Talk so far has centered on the idea that the farmer should secure for his farm products 110% of parity. Or, in other words, he should secure 10% more for his commodities in relation to purchasing power than he secured in the 1909-1914 period.

Those in the sugar industry are naturally interested in this new legislation from the standpoint of its possible effect on sugar. Therefore, we come to the question of what is parity for sugar.

In the past where there has been a discussion of parity in connection with farm products, it has been on the matter of how much the farmer received for the *actual* commodity he produced. It has had nothing to do with the price of the *finished* goods made from his product. For example, it has not contemplated the price of *processed* flour nor the price of *processed* cotton. We would imagine the same principle would apply to sugar. In other words, the products are *sugarcane* and *sugar beets*, and not refined sugar. Of course, Congress could change this principle.

Another point of interest which will be solved only when the bill completes its journey through Congress is whether the legislators are going to consider this matter purely on the basis of the price at which the basic farm commodities sell or whether they will take into consideration any benefit payments received by the farmers for restriction of acreage, etc. None of this has as yet been clarified. The view has been expressed to us by certain well posted friends in Washington that in considering what the farmer secures for sugar beets or sugarcane, cognizance should be taken of the benefit payments.

The average price for refined cane sugar during the 1909-1914 base period was 4.798c per pound net cash at New York. The average price for raw sugar, cost and freight at New York, was 2.694c per pound. The average duty paid price for raw sugar was 4.00c per pound. Those figures we know to be facts, but they do not, in themselves, give the answer. Anyone who is basing his thinking on those particular figures may be led astray, because they would be assuming that parity will be based on the finished or processed product, rather than the farmers' product.

There is one point we want to make clear here and that is the 1909-1914 base is considered 100%. To adjust that base so that it will properly reflect the purchasing power of the farmer's dollar today, it is necessary to multiply the 1909-1914 base by the index figure that is established by the Department of Agriculture. This figure is calculated monthly. The July figure was 133% or 1.33. Therefore, you take the base of the 1909-1914 period and multiply it by 1.33 in order to find out what the farmer should receive so that his purchasing power may equal that of the five year period prior to World War No. 1. By simply taking the average net cash price for refined sugar mentioned above and multiplying it by 1.33 we find that 6.38c net cash is the supposed parity for refined sugar. Then, since certain elements in Congress are talking about the farmer's receiving 10% or 20% more than parity, you would further increase the indicated parity price for refined sugar by 10% or 20%. In other words, you would take 6.38c and add 10% or 20% to that price, and presumably, on this kind of information, you would have the assumed indicated ceiling. We make the point, however, that none of this is necessarily correct since it is all calculated on the basis of the *finished* product.

The principle fixed by Congress to date, has been to make the parity on the basic commodity. On this latter theory, as a basis, we must delve into the question of what the farmer received for sugar beets (or sugarcane) in the period 1909-1914. During this period the beet farmer received for his sugar beets an average of $5.50 per ton. Multiplying this figure by the index of 1.33 would give a parity of $7.315 per ton of beets. (Adding 10% to that brings the figure up to $8.046 per ton. Adding 20% would make it $8.778 per ton of beets.)

Whether parity is $7.315, $8.046 or $8.778 per ton of beets, it still must be translated into the price of refined sugar to ascertain whether today's price is too high or too low. It should be noted however, that until a formula is established by Congress in the new bill any estimates must be pure assumption.

Now, having stated the fundamentals of the situation, we come down to the question of translating the *parity of sugar beets* into a refined sugar price in order to give us some indication as to whether today's price is above or below parity. It is obvious, in studying the question of parity in relation to sugar, that the Government will be faced with a real problem in attempting to arrive at a formula that will be sound and equitable since conditions vary substantially in all of the areas involved as to yield, type of processor-farmer contract, etc. Using the figure of $7.315 per ton of beets as parity, one can, depending upon the set of factors used, arrive at a range of from 4.75c to 5.10c per pound for *beet* refined sugar.

In this connection we would like to call your attention to Secretary Wickard's statement, at his Press conference yesterday, to the effect that he felt any ceiling on farm prices should be placed above parity to give prices some flexibility. If this thought is carried out in the bill (and many Congressmen probably will be willing to fall in with this idea), say, by 10%, we arrive at a price for *beet* refined sugar, using the same formula as above, ranging upward from 5.25c basis.

The foregoing are, as we have noted, beet prices. The differential for cane refined over beet ranges from 5 to 20 points.

We wish to emphasize the fact that the above prices were found on the basis of the July, 1941, index of 1.33. If the war continues, there is every indication that the index figure will maintain its upward trend. Unless there is an abrupt about-face of Congressional opinion, it would appear from Washington reports that the price fixing bill will be a comparatively weak piece of work, since, if wages are not to be directly controlled and farm products are to receive preferential treatment, upward adjustments of such prices are as fixed will be constantly necessary.

It will be perfectly obvious, to repeat, that there are some very large obstacles in the path of any attempt to fix refined sugar prices on the basis of parity for sugar beets or sugarcane. We may at least doubt whether it can be done with satisfactory results. There are so very many variables, and it must not be forgotten that a substantial part of our sugar supplies originate in Cuba and other foreign countries. Perhaps some entirely different method may be necessary in fixing sugar prices, although, of course, it may yet be found possible to use some sort of parity formula.

It is interesting to note that Leon Henderson, testifying before the House Banking and Currency Committee this week, presented a table showing the percentage of wholesale and retail price increases between August, 1939, and June, 1941. This table was as follows:

Commodity	*Wholesale* (*Percent*)	*Retail*
Sugar	13.7	11.6
Butter	50	36
Canned pink salmon	48.9	33
Dried beans	64.5	25
Coffee	52	2.7
Lard	68	30
Overalls	24.6	12.8
Work trousers	20.3	7.5
Rugs	23	21
Mattresses	18.9	3.8
Sheets	25	12

Obviously sugar has dragged behind all the rest with its increase of only 13.7%.

EDITOR'S NOTE:—We gratefully acknowledge the courtesy of Lamborn & Co. in allowing us to reprint the above excellent and timely discussion of parity, which appeared in the Lamborn Sugar-Market Report. Mr. Lamborn's discussion having been limited to beet growers, your Editor submits the following additional information with regard to sugarcane growers: *During the 1909-14 period, the sugarcane farmer received an average of $3.73 per ton for his sugarcane (according to the Determination of the Sugar Section made in 1935). Multiplying this figure by the index to 1.33 would give a parity price of $4.96 per ton of sugarcane. 110% of parity would of course, bring the figure up to $5.45 per ton.

Resolution

BE IT RESOLVED by the general meeting of sugarcane farmers assembled for the Annual Field Day program under the auspices of the Louisiana State University at Baton Rouge, Louisiana, this 14th day of August, 1941, that we unanimously protest the arbitrary and sudden action of Mr. Leon Henderson, Administrator of the Office of Price Administration and Civilian Supply, in attempting to fix the price of raw sugar at 3-1/2 cents per pound, which is 30 points under the existing market, and we deplore the dictatorial manner in which the action was taken without consultation with sugar producers or sugarcane growers and without following the democratic process of permitting the industry concerned to be heard on increased cost of production and transportation or of other price factors. We further protest and challenge the statement being made by Mr. Henderson that a 3-1/2 cent price for raw sugar will bring parity because of a 3-1/2 cents price would mean only 76 percent of parity to the producer of raw sugar and less than 90 percent of parity for the sugarcane grower. We protest the action as violating the letter and the spirit of the bill proposed to Congress by Mr. Henderson, seeking to legalize price control, which bill provides that the price of agricultural commodities (raw sugar in this instance) will not be controlled unless they exceed 110 percent of parity.

BE IT FURTHER RESOLVED, that in view of the reduction in acreage suffered in 1940 and 1941 by Louisiana sugarcane growers and in view of emergency conditions which call for harmony and unity among the citizens of our Nation, we request a reconsideration of this precipitate price fixing action and a full opportunity of consultation for producers and farmers affected.

Tentative 1942 Proportionate Shares

Sugarcane growers of Louisiana and Florida should plant about 58,000 acres more of sugarcane for 1942-43 than in 1941-42 if sugar supplies are to be maintained at the level provided for in present sugar legislation, according to officials of the Department of Agriculture. This would represent a 20 percent increase over the 1941 proportionate share acreage for each sugarcane farm in Louisiana and Florida.

Under the Sugar Act of 1937 payments can be made to producers in any area on an acreage sufficient to provide for the quota of that area and normal carryover. Because of the sharp decline in Louisina sugar production in recent years, stocks in the mainland cane area have been seriously depleted.

Granted normal yields on the total of 343,000 acres that would be planted in the two States, the total production would be about 600,000 short tons of sugar, raw value. This compares with a total anticipated production of approximately 425,000 tons in 1941-42.

This announcement is being made for sugarcane growers who may wish to plan their 1942 crops in accordance with sugar production requirements provided for in current sugar legislation.

However, it is pointed out that the 1941-42 crop which will be harvested this fall is the last crop on which conditional payments may be made under present sugar legislation. Thus far, no action has been taken by the Congress on the extension of the Sugar Act or the enactment of new sugar legislation. If legislation is approved, the Department of Agriculture will be able to advise growers concerning the specific "proportionate shares" or acreage allotments on the basis of which payments may be made on the 1942-43 crop.

New Source of Wax Found In Sugarcane, Says USDA

Out of the sugarcane "mud" that results during the process of milling cane, U. S. Department of Agriculture chemists see the possibility of recovering annually some 6 or 7 million pounds of wax useful in industry and to the householder. Coming at a time when additional domestic sources of such material are especially desirable, due to import difficulties, this discovery is consdered valuable to defense.

The wax occurs as a thin coating on the surface of the cane stalks, according to Howard S. Paine, of the Bureau of Agricultural Chemistry and Engineering, who directed the research on the subject. The coating is so thin, he says, that a ton of cane yields less than two pounds of wax, and recovery would not be economically feasible if it were not concentrated incidentally in the manufacture of sugar. As the juice is crushed from the cane most of the wax is washed off and remains in suspension in the juice until taken out with the "mud" formed in clarification. This "mud" has always been thrown away as waste although, when dried, it contains from 5 to 17 percent of crude wax.

The investigators have determined that the best way to get out the wax is to treat the dried "mud" with a solvent and then use a selective solvent to remove fats that have come away with the wax. The

result is a hard wax with a melting point of 174° F. Samples sent to the trade indicate there will be a good demand for the product whenever it is produced in quantity. It can be used in the manufacture of polishes, impregnated and coated products, moulded articles, and to replace waxes now difficult to get because of unsettled world conditions.

River Parish Farmers Have Field Day

Sugarcane farmers from the parishes of St. Charles, St. John, St. James and Ascension held a sugarcane field day at the L. S. U. Experimental Test Plats on Godchaux Sugars, Inc. plantation at Reserve, Wednesday, August 20 at 2 p. m.

Important timely information on planting, diseases, insect control, land preparation, winter cover crops, eradication of Johnson Grass, varieties and sugar legislation were presented to the farmers by the staffs of the L. S. U. Experiment Station at Baton Rouge and the U. S. Sugar Station at Houma.

Following the discussions a tour of the test Field was made to give the planters an opportunity to observe the new varieties of cane being tested for growth, sugar content, disease resistance and yield by the experiment station.

The information obtained will assist cane farmers in planning the coming crop in such a manner as to enable them to secure higher yields per acre and thereby assisting them to increase their income.

Speakers for the day were as follows: Walter Godchaux, Vice President, Godchaux Sugars, Inc.; E. C. Simon, Sugarcane Investigator, L. S. U. Experiment Station; I. L. Forbes, Associate Plant Pathologist, L. S. U. Experiment Station; Alvin Dugas, Entomologist, L. S. U. Experiment Station; John Burden, Agriculturist, Little Texas Plantation, George Arceneaux, Agriculturist in Charge fo the U. S. Sugar Station; E. M. Summers, Plant Pathologist, U. S. Sugar Station; Marcel Voorhies, Manager, American Sugarcane League; W. M. Grayson, Senior Agricultural Economist, Sugar Section, A.A.A., Marion Matherne, and F. D. Gravois, Jr., 4-H Club Demonstration Team, St. John Parish; W. E. Simmons, County Agent, St. Charles Parish; E. R. McCrory, County Agent, St. John Parish; R. C. Calloway, County Agent, St. James Parish; and E. L. Landry, County Agent, Ascension Parish.

The field day was sponsored by the L. S. U. Agricultural Extension Department in cooperation with the L. S. U. Experiment Station and Godchaux Sugars, Inc.

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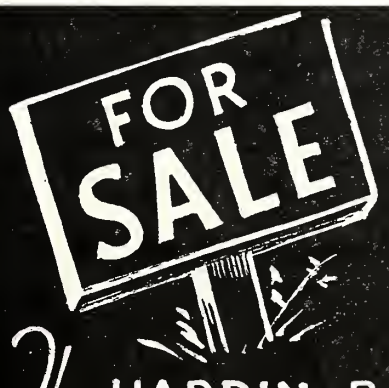

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THE SUGAR BULLETIN

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We stand for the encouragement of Home Industries as against foreign Competition

Vol. 19 NEW ORLEANS, LA., SEPTEMBER 15, 1941 No. 24

Announcing The

NINETEENTH ANNUAL MEETING

of the

AMERICAN SUGAR CANE LEAGUE

of the

U. S. A., Inc.

Thursday, September 25th, 1941

Convention Hall - Mezzanine Floor Monteleone Hotel
New Orleans, La.

Meeting Convenes at 1:30 P. M.

At this meeting there will be an election of Officers and Members of the Executive Committee to serve during the ensuing year.

All Members of the League Will Please Consider This as an Official Notice To Attend

THE
SUGAR BULLETIN
414 Whitney Bldg., New Orleans
Marcel J. Voorhies, Editor
Issued on the 1st and 15th of each month. Official Organ of the American Sugar Cane League of the U. S. A., in which are consolidated
The Louisiana Sugar Planters' Assn.
The American Cane Growers' Assn.
The Producers & Mfrs. Protective Assn.
Subscription Price, 50 Cents per Year

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Statement Presented by Col. W. F. Giles

(President of The American Sugar Cane League, to the Committee for Reciprocity Information on Behalf of the American Sugar Cane League, September 9, 1941)

Speaking as the representative of the American Sugar Cane League of New Orleans, Louisiana, the brief filed on August 23rd asked that the State Department make known to domestic producers the propositions concerning sugar which are to form the basis of negotiations with the Cuban Government. We requested that the State Department make a declaration of its intentions, in order that we might intelligently discuss what is in prospect. Ostensibly, this public hearing is a part of the democratic process of permitting interested parties to express their views and to submit their recommendations; but we find ourselves in a position of uncertainty and helplessness in the absence of any declared intention on the part of the State Department. We are required to argue by assumption.

Our concern is not imaginary but is based upon experience. For instance, in 1939 there was a public hearing, but everyone assumed that the basic relationship should be maintained of a reduction in tariff and the existence of a quota system. Instead, the State Department changed the language of the original Cuban Trade Agreement, which established a completely new arrangement. The Tariff Commission having reported that the difference in cost of production amounted to a $1.50 tariff rate on Cuban sugar, the President of the United States put the $1.50 rate into effect in 1934. Later in the same year the reduction from $1.50 to 90c was justified, in part, by the fact that the Cubans would be restricted in the amount of sugar which they could import under the quota system. Accordingly, when the President suspended quotas in September 1939, the $1.50 rate of duty on Cuban sugar was reinstated; but, in December 1939, the language of the Agreement was so changed that, if the quotas are suspended, there would be no restoration of the $1.50 tariff rate. The reinstatement of the higher rate would only occur in case the quota provisions of the Sugar Act should expire.

Such a change has destroyed the concurrence of the reduced duty and quotas, which change was made without notice and without an opportunity for the producers to be heard. We protest strongly against such a procedure and request that the original language of the 1934 Cuban Trade Agreement be restored.

In the absence of any declared intention on the part of the State Department, we submit that the facts concerning our relations with Cuba, in terms of sugar, fully justify a demand that the tariff on the importation of Cuban sugar be increased. Cuba today has a guaranteed market in the United States for the greatest quantity of sugar that it has imported into the United States in more than 10 years, and the price paid for that sugar is considerably higher than the average price of 10 years. Thus, Cuba is being permitted to market more sugar at a higher price. Therefore, the tariff rate should be increased in proportion to the added benefits enjoyed.

And, not only is Cuba permitted to market larger quantities of sugar at higher prices in the United States market, but the price paid for Cuban sugar in the so-called "world market" is today more than double the price which Cuban sugar has commanded in that market for several years. It is well known to anyone who keeps informed about the Cuban marketing of sugar that usually two-thirds of the Cuban production has been marketed in the so-called "world market" at a lower price. The Cubans have averaged out the total accordingly to get a favorable price for the whole crop. But, this year Cuba is marketing more than 85% of its production in the United States at the highest price obtained in several years, and even the balance which is being sold to England and other world markets is listed at a doubled price. Thus, any way you take it, Cuban sugars are in an improved position.

The national defense agency known as OPACS has fixed a price for raw sugar in the United States at 3½c, which is claimed to be a fair and reasonable price for raw sugar. The Cubans have disagreed and have withdrawn from the market for almost thirty days. Of course, this is consistent with the usual Cuban practice of taking advantage of every opportunity to force the price of sugar in the United States upwards. They did this in 1920 when the consumer paid 25c a pound for sugar, and they tried it again in 1939 when the European War was declared forcing the President to suspend quotas to bring the price down. Now, they have made demands involving questions of lowered freight rates to the United States; making available ships; an advance in the price ceiling; and finally a reduction in the tariff.

The sugar program adopted by the United States Government in 1934 was declared to be for the purpose of alleviating the distressing conditions in the

sugar industry. The period referred to was 1931, 1932, and 1933, during which time Cuban raw sugar sold for $1.16, while domestic raws sold for $3.16. At the $3.50 pegged price, with a 90c duty, Cuba is getting an increase of 114%, while domestic raws are sold at only a 10% increase. Should the 75c rate of duty be imposed, Cuba would be receiving an increase of 137% over the 1931-33 period, while domestic producers are receiving a mere 10% improvement over the distressing conditions which the Federal Government sought to alleviate.

In yesterday's paper we read about certain offerings for *future* delivery, on a basis which includes concessions in the tariff on Cuban sugars. It is reported that the owners of Cuban sugar are making contracts which anticipate a tariff reduction of 15c per 100 pounds. What is the basis of such a concession? What information do these Cubans have which is not available to us? The State Department, having refused or failed to respond to our request for a declaration of intention, must we assume that Cuban producers are better informed on the subject than we are? But we do submit the plain fact that if a price of 3½c for raw sugar is justified by OPACS as a fair price for domestic producers, then there can be no justification whatsoever for the maintenance of such a price, if another Department of the Government would grant to Cuban producers a tariff concession which would, in effect, give them a price of 3.65c, while domestic producers are forced to accept 3.50c.

If the purpose is to give Cuba a better price for raw sugar, the solution seems fairly simple and plain as far as Government procedure may be concerned. The going price of raw sugar on August 12th was 3.80c, when OPACS set a ceiling of 3.50c. This was tantamount to reducing the price of raw sugar 30 points. Now, if the Cubans need 15c, would it not be simpler and more efficient for OPACS to raise its ceiling to 3.65c, so that domestic producers could enjoy the price, as well as foreign producers in Cuba? Why go through all the travail and labor of negotiating a supplemental Trade Agreement and reducing tariff during an emergency period, where considerations are not based upon normal conditions? Due to increased costs of production, domestic producers need the 3.80c price more than Cuba needs the 3.65c.

We ask in complete sincerity that the negotiators, who represent the United States Government in the negotiations on a supplemental Cuban Trade Agreement, give first consideration to the interests of the domestic producers in matters concerning sugar. In doing so, the facts will require that the tariff on Cuban sugar be increased. We further recommend that the original language of the Cuban Trade Agreement be restored, whereby reductions in the tariff on Cuban sugar below $1.50 shall continue in effect only as long as the quota provisions of the Sugar Act are operating, so that such tariff reduction below $1.50 will be concurrent with the operation of quotas.

The Congressional Record of Friday, September 5th, contains a statement by Senator Joseph O'Mahoney of Wyoming, which we feel should be part of the record of these hearings. At a time like this, when the question of national defense is of transcendent importance to all officials of our National Government, the unity of the people of the United States becomes a paramount consideration. The Senator from Wyoming has been a leader in proposing and drafting sugar legislation expressing the intent of Congress. He has interpreted the intent of Congress in congressional debates and in proposing the language of the Sugar Act and the amendments thereto. Therefore, his solemn expression, evidently concurred in by other Members of the United States Senate who participated in the discussion Friday night, is a development which must necessarily receive the highest consideration of the officials of the State Department and the negotiators on behalf of the United States Government. Quoting from Page 7558 of the Congressional Record for September 5, 1941, Senator O'Mahoney of Wyoming declared:

"I have no intention of appearing before the Committee for Reciprocity Information because I have lost faith in the value of such appearance. I have lost faith that the presentation of any evidence there will affect the decision to be rendered. So I prefer to make my statement here in this body, which, having considered the facts and the evidence, has on numerous occasions indicated its belief that the domestic production of sugar beets and sugarcane should be encouraged in order that the American consumer of sugar might not be exploited by those who produce sugar in offshore areas."

The Sugarcane Variety Problem

(*By George Arceneaux, Agronomist, Division of Sugar Plant Investigations, Bureau of Plant Industry, United States Department of Agriculture*)

Results of field tests recently published (2), (3), (4) as well as the experience of commercial growers during recent years have indicated that some of our sugarcane varieties are not yielding as satisfactorily as during previous years. It is therefore in order that we carefully consider at this time the question of varietal preference in the light of all information now available.

The following table showing the proportionate acreages devoted to different varieties in each of the 3 sections of the Sugar Belt is based, except as mentioned below, on information recently supplied to the author by county agents in the different parishes. In most cases the percentages shown are based on surveys conducted by the individual agents. In others they were derived from the agents' general knowledge of conditions in their respective parishes. Estimates for Lafayette Parish are based on information supplied by Mr. George Billeaud of Broussard and Mr. M. V. Yarbrough of Youngsville. We feel that the data as a whole give a relatively accurate variety census for the current year and we wish to express our appreciation of the excellent cooperation received in assembling the information.

Co. 290 which accounts for an estimated 39.45 percent of our acreage, and no doubt for a considerably greater percentage of the expected tonnage, has been the object of much concern within recent months. Stands of plant cane and especially first stubble obtained with Co. 290 in 1941 are much below the standard of previous years and, while evidence so far available indicates that these stand deficiencies were due largely to an unusual combination of unfavorable weather condition, there is evidence that yields of Co. 290 in comparison with yields from C.P. 29/116 for instance, have been declining during the past 3 years. In the average of 26 tests on light soils in Louisiana during 1938 (4) Co. 290 outyielded C.P. 29/116 by 706 pounds of sugar per acre. In the average of similar tests during 1939 (2) the difference was 229 pounds in favor of Co. 290 while in

Percent distribution of sugarcane acreage by variety in different sections of the Louisiana Sugar District—1941 crop

Section	Number of Parishes represented	Percent of State acreage represented(1)	Variety							
			Co. 281	Co. 290	C. P. 28/11	C. P. 28/19	C. P. 29/320	C. P. 29/116	C. P. 29/103	Other varieties
Southeastern	8 (a)	40.87	20.92	22.28	5.93	18.84	25.50	3.31	1.45	1.77
Northeastern	5 (b)	19.06	16.72	6.98	4.09	19.51	51.28	.74	.19	.49
Southwestern	6 (c)	38.22	.69	74.00		2.44	6.19	12.91	2.00	1.77
Three sections	19	98.15	12.23	39.45	3.26	12.58	22.99	6.55	1.42	1.52

(1) According to information supplied by Houma office of Agricultural Adjustment Administration.
(a) Assumption, Ascension, Lafourche, Terrebonne, St. John, St. James, St. Charles and Jefferson.
(b) Iberville, East Baton Rouge, West Baton Rouge, Pointe Coupee and Avoyelles.
(c) St. Mary, Iberia, Vermilion, St. Martin, Lafayette and St. Landry.

1940 (3) C.P. 29/116 surpassed Co. 290 by an average difference of 353 pounds of sugar per acre. Similarly, average trends in tests on heavy soils changed from slightly in favor of Co. 290 in 1938 to substantially in favor of C.P. 29/116 in 1940. Available stand data from widely scattered tests indicate that C.P. 29/116 may show a still greater superiority to Co. 290 in the 1941 crop. In view of the above observations, a partial substitution of C.P. 29/116 for Co. 290 under suitable conditions would seem amply justified.

In the average of 68 replicated tests on light soils during 1938, 1939 and 1940 Co. 290 surpassed C.P. 29/116 by nearly 14 pounds of sugar per ton of cane thus emphasizing the danger of planting C.P. 29/116 on our more fertile light soils. However, in the parishes of St. Mary, Iberia, Vermilion, St. Martin and Lafayette, C.P. 29/116 has matured very satisfactorily and its acreage in that section may be expanded with considerable safety on all except the most fertile of light soils. On heavy soils C.P. 29/116 has matured much more satisfactorily in comparison with Co. 290, as illustrated by a difference of less than 3 pounds of sugar per ton of cane in favor of Co. 290 in the average of 27 replicated tests during 1938, 1939 and 1940. On such soils therefore C.P. 29/116 may apparently be safely planted wherever Co. 290 matures satisfactorily.

In limited tests on heavy soils during the past 2 years C.P. 29/103 has slightly surpassed Co. 290 in yield of sugar per acre but in tests on light soils the advantage in this regard has so far been consistently in favor of Co. 290. C.P. 29/103 has proved definitely superior to Co. 290 in yield of sugar per ton of cane, but actual differences have varied considerably from year to year. In studies conducted by Mathes and Ingram (5) C.P. 29/103 was found extremely susceptible to borer damage while Co. 290 proved relatively resistant, which probably accounts in part at least for observed variations in relative sugar contents from year to year.

C.P. 29/103 may be regarded as a logical substitute for Co. 290 in situations where C.P. 29/116 would not mature satisfactorily. These would include, among others, the most fertile light soils of the western parishes and the better types of heavy soils all over the Sugar District. However C.P. 29/103 is susceptible to chlorotic streak (1) and its acreage should be expanded with caution pending the accumulation of more information on the effect and control of this disease under Louisiana conditions.

C.P. 29/320, the second most important variety in Louisiana in point of estimated acreage has also shown some evidence of a decline in relative yields. In the average of 27 replicated tests during 1938, C.P. 29/320 surpassed C.P. 28/19, its most important competitor, by 546 pounds of sugar per acre (4). In 28 tests during 1939 (2) the average difference was 288 pounds of sugar per acre in favor of C.P. 29/320, while in the average of 25 tests during 1940 (3) C.P. 28/19 slightly surpassed C.P. 29/320 in yield of sugar per acre. The observed decline in relative yields of C.P. 29/320 has been closely associated with increasingly poor stubble stands. The value of C.P. 29/320 is further impaired by its extreme susceptibility to chlorotic streak which may contribute to further declines in future relative yields of the variety. Also, as pointed out by Abbott (1), the presence of extensive acreages of C.P. 29/320 in which chlorotic streak is now spreading rapidly will greatly complicate the problem of controlling the disease through roguing; and it would therefore seem quite desirable to greatly curtail future plantings of this variety. C.P. 28/19 deserves consideration as a partial substitute for C.P. 29/320 but it should perhaps be emphasized that C.P. 28/19 is likewise susceptible to chlorotic streak although showing less severe injury than C.P. 29/320 from the disease (1).

In the average of tests at 10 stations on light soil during 1940 C.P. 29/103 surpassed C.P. 29/320 by 1106 pounds of sugar per acre and more than 7 pounds of sugar per ton of cane. In the same tests C.P. 29/120 outyielded C.P. 29/320 by 454 pounds of sugar per acre and nearly 10 pounds of sugar per ton of cane. Therefore both of these varieties may likewise be considered as desirable substitutes for C.P. 29/320. However, both varieties are reported very susceptible to chlorotic streak (1) and thus neither one would be a great improvement over C.P. 29/320 as regards resistance to this disease.

In the limited tests so far conducted C.P. 33/243 has averaged slightly under C.P. 29/320 in yield of sugar per acre but slightly higher than C.P. 29/320 in yield of sugar per ton of cane. It has the advantage of being more resistant to chlorotic streak and therefore deserves consideration as a possible substitute for C.P. 29/320.

The unpopularity of C.P. 28/11 as indicated by its very minor position in point of estimated acreage is amply justified by the results of tests during the past. However should yield capacities of Co. 290 and C.P. 29/320 be further impaired as a result of future changes in the disease situation it is very likely that more extensive use could be advantageously made of this hardy variety. It is considered significant that C.P. 28/11 has proved resistant to chlorotic streak as well as to other major diseases prevalent in Louisiana (1).

The prominence enjoyed by Co. 281 may be justified solely by its superior windrowing qualities. The cultivation of this variety in preference to C.P. 28/19 for instance ordinarily involves a sacrifice of 600 to 800 pounds of sugar per acre. In comparison with Co. 290 and C.P. 29/116 the difference is of course much greater. The prominence which may properly be accorded Co. 281 in individual cases will therefore depend on the extent of anticipated windrowing as influenced by exposure to frost injury and the expected duration of grinding, on the one hand; and on the difference in productivity between Co. 281 and the competing variety or varieties on the other.

In conclusion it should perhaps be pointed out that we should not permit our experience during the 1940 and 1941 growing seasons to have an undue influence on our present appraisal of sugarcane varieties. The behavior of individual varieties has been greatly disturbed as a result of the very unusual weather conditions and therefore observed yield and stand relationships may be of relatively limited significance. For instance the exceedingly low infestation of borers during 1940 due to the severe freezes of the preceding winter (5) no doubt had a bearing on the relatively improved performance of borer susceptible varieties such as C.P. 29/116 and C.P. 29/103. It is felt, however, that for reasons discussed above some readjustment in our variety program at this time is amply justified.

Literature Cited

(1) Abbott, E. V.
1941. Results of experiments with chlorotic streak in 1940. Sugar Bull. 19 (No. 14, April 15) pp. 60-61.
(2) Arceneaux, G., Gibbens, R. T., Jr., and Krumbhaar, C. C.
1941. Summary of results of sugarcane variety tests during 1939. Sugar Bull. 19 (No. 18, June 15) pp. 93-94.
(3) Arceneaux, G., Hebert, L. P., and Krumbhaar, C. C.
1941. Results of variety tests in Louisiana during 1940. Sugar Bull. 19 (No. 18, June 15) pp. 94-100.
(4) Arceneaux, G., Gibbens, R. T., Jr., and Krumbhaar, C. C.
1939. Variety tests of sugarcanes in Louisiana during 1938. Sugar Bull. 18 (No. 1, October 1) pp. 5-13.
(5) Ingram, J. W.
1940. A summary of sugarcane insect investigations conducted at the Houma Laboratory of the Bureau of Entomology and Plant Quarantine during 1939. Sugar Bull. 19 (No. 4. November 15, 1940) pp. 4-6.

Surplus Lands Present Problem in Sugar Belt

At the annual Louisiana Farmers and Homemakers' Short Course held on the campus of Louisiana State University at Baton Rouge, Mr. Bronier Thibaut was awarded the recognition as Master Farmer. This is an award made to a few farmers every year by the Progressive Farmer.

At the ceremonies when the awards were made, Mr. Bronier Thibaut had the following to say with respect to surplus land problems in the Sugar Belt:

"There are many substitute crops for sugarcane in South Louisiana, some are possible for profit under average conditions, many are not. Before I go into any discussion of them, I will be utterly frank in stating that there is no generally satisfactory replacement cash crop for sugarcane, particularly when the need and right of the land owner, the labor and community are considered. This opinion seems verified by the experience of the generations of farmers before me, who tilled the soil and cared for its community life.

"Sugarcane is of the grass family, and its growth and handling is suited to our fertile soil-abundant rainfall and sunshine. Normally we have weather in the spring that permits cultivation and sufficient growth to keep down and eventually to shade out other grasses. It may surprise you to know that during the summer under average conditions sugarcane in Louisiana makes a more rapid growth than anywhere else in the world. The weather generally permits satisfactory plowing under of the legumes, planting and harvesting sugarcane in the fall. Normal crop practices permit satisfactory maintenance of food for men and beast and sufficient rotative crops for soil conservation. On large cane farms it formerly was the practice to have two-thirds of cultivable land in cane, the balance in legumes and food crops. On small farms the percentage of food crops and legumes was greater, and thus the best balanced economy of operations was obtained. Cane is processed in nearby factories, so the whole crop and its processing permits maximum labor utilization and cash money circulation.

"Nearly one hundred and fifty years of planting have demonstrated the extreme difficulty of replacing sugarcane as the cash crop without serious injury to the community involved. At present under Federal sugar control legislation there are severe restrictions prohibiting adequate proportionate shares necessary for balanced and economical production. This has upset normal practices, created a condition where we have vast unused acreage capable of providing gainful use fo labor and capital. This legislation exists even though the continental United States produces less than thirty percent of American consumption, including both cane and beet sugar. About thirty percent of our market is supplied by our far distant tropical Island possessions and roughly forty percent comes from foreign countries. We hope time and perhaps the present unfortunate war condition will demonstrate the wisdom of reasonably encouraging more home production. The last war with sugar scarce, retailing at thirty cents per pound should have demonstrated for all time the advisability of greater home supplies, but such lessons are often forgotten or forced aside by views of national economy or by political expediency.

"I did not desire in outlining the above to divert from my subject, but I considered any discussion pertaining to sugarcane land replacement crops should briefly outline some of the reasons why and wherefore placed upon us. Granting that the land cannot go into cane we have found that some surplus and most of the marginal lands can go with reasonable safety into cattle. It is not always practical to handle the surplus lands in this manner due to their location on the property, availability to water, etc. If grazed, they should be mowed two or three times annually to control weed growth. This does not only improve grazing but minimizes forage poisoning. These lands should be seeded to White Dutch Clover at the rate of about ten to fifteen pounds per acre, and if not used for grazing it is sometimes profitable to harvest the clover for seed and hay. The sale of clover seed has been very profitable this season. In conjunction with cattle, I would certainly recommend this practice on all marginal lands, and feel that it might be a good practice even without cattle. If utilized in such a manner over a long period of years, taxes on this land would have to be lowered. Such a practice does not give much employment.

"In some sections, along river and bayou fronts, rice, provided a good marketing quota and satisfactory price levels can be obtained, offers a possible profit and use. Rice though—as we all know—is an overproduced national crop; so favorable quotas and prices are not to be expected.

"Our land will also produce an abundant growth of cotton, under very favorable conditions yielding a bale or more to the acre, but we seldom get the favorable conditions. Extreme care in early planting and use of selected varieties might obviate some of the production troubles—but here again we enter an overcrowded field. Due particularly to prevalence of excess moisture and insect injury it is difficult to get adequate results from corn and other grains. When labor is plentiful, price levels and weather

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conditions favorable, truck crops yield bountifully, but a concurrence of favorable conditions are generally not present and make large scale operation quite uncertain.

"Soy beans hold some promise, but can only come after future experimentation and development.

"As matters stand, I am afraid that I have contributed little help and no comfort to the onse paying taxes on surplus lands, so I urge all Louisianians as the best solution, constant endeavor to secure a fairer and better utilization of our lands in sugarcane. Granted one has reasonably balanced conditions, the American cane and beet farmer can furnish the American consumer his best insurance policy for cheap sugar under both peace and war time conditions—to labor, most jobs, and to industry, maximum buying power from the products of his land."

Practical Johnson Grass Control

(John G. Burden, Little Texas Plantation, Avoca, P. O., La.)

In control and eradication of Johnson grass we have used a combination of fallow plowing and smother crops, with equally satisfactory results on lands where stubble was to be destroyed, or where legumes had been grown the preceding year. The method necessitates the loss of the land for two years from gainful productions, but it must also be remembered that under our present system of two years in cane and one in soybeans, there is one year in which nothing of salable value is produced.

Treating with land which was in stubble the preceding year, our experience has been that nothing is accomplished by early spring plowing; hence this land is capped off with a lister in April or May, and except for an occasional chopping to keep down the growth of grass, is left unplowed until June, at which time equipment can usually be spared from regular field cultivation. The rows are then set up with tractor and row plow. As soon as a growth of grass begins to appear, the rows are opened with a lister and left in this condition for several days to a week, with the grass roots exposed to the sun. The rows are then again reversed with a row plow, and this procedure is followed and repeated as moisture conditions require through July and August. It will, of course, be recognized that hot dry weather during this period is of great advantage. In September, by which time noticeable control of grass growth is apparent, the rows are again reversed, chopped, rolled and sewed to 30 pounds of Melilotus per acre.

This rather early planting of Melilotus indica will

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result in a good stand and an early development of root system, thus minimizing freeze damage during the winter. Our observation has been that a rank heavy cover of clover during the winter and spring so retarded the development of Johnson grass that little is discernible during the months of March, April and May. In the latter part of May, the clover has matured, and in dying falls down and causes a heavy close lying blanket of cover which continues to retard any appreciable grass growth. At or about this time, the fallow plowing process is resumed and continued as in the previous year, except that it is unnecessary to plow at such frequent intervals, as control has progressed to the point where but few living roots remain in the soil, and in this weakened condition one plowing about each third week is adequate. The lands so treated are planted to fall cane in October.

In lands infested with Johnson grass which have a summer soybean crop growing on them, we turn under the bean crop in late June or early July. The rows are replowed once or twice, depending on weather conditions, in August and September, and sowed to Melilotus indica. The procedure for the following year is identical as in the treatment of the stubble land previously described. It is interesting to note that both our row count records and growth records show that the stubble land on which no summer legume crop was grown compares favorably with counts and records made where beans were turned under. This would appear to indicate that all the nitrogen required is supplied by the clover crop, or the mechanical condition of the soil is so improved that a greater percent of plant food is made available by repeated aeration and superior oil condition.

Many variations and improvements of the above procedure may of course be adapted to the individual planter's condition, but it should always be borne in mind that to obtain results, the Johnson grass must never be allowed to develop to the point of flowering. This cannot be stressed too strongly, as neglect during the control period will permit the plant to complete its cycle and develop a complete root system, resulting in failure to achieve results and loss of time and money previously expended.

One variation which we are using this year with good results is the flush or flat plowing of the control plot. Rows which have previously been set up are capped off with a lister, chopped and harrowed until practically level, and then plowed to the center of the plot with the conventional 2 or three bottom rice plow. After being disked and harowed, rows are laid off at 5'10" intervals and set up with a row plow. Noticeable advantages of this method are the improved drainage due to increased height of land at center of plot, and uniformity of row widths which are of much benefit in power cultivation when 2 and 3-row cultivators are used.

Cost will, of course, prove variable. In our work thus far, the work over a two-year period will be approximately $7.30 per acre and is allocated as follows:

$3.50	—plowing
1.40	—Disking & Harrowing
1.80	—Clover seed and sowing
.60	—Miscellaneous—drains, laying off rows, etc.
$7.30	

Our experience indicates that in previously heavily infested lands, our saving in hoeing on the first plant and stubble crop will equal, or nearly equal the expenditure for eradication of Johnson grass.

"I have been using Magnolia Products in my equipment for over ten years and I am glad to say they have been very successful in keeping my operating costs low, and my machinery in first-class condition."*

C. A. Medearis

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*This is a voluntary statement for which no compensation of any description was given to Mr. Medearis.

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